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ABSTRACT

This report describes the most significant activities of the Dayton-Miami Valley Consortium during the period of September 1, 1967 - February 28, 1970. The purpose of the Consortium is to promote interinstitutional cooperation and thus improve planning, research, instruction, and administrative services. The activities of the Consortium fell in 2 broad areas: (1) development activities which included: computer services, cross-registration, course consolidation, faculty exchange, library programs, learning resources circuit, educational television, interinstitutional working committees, joint community service activities, and area studies; and (2) research and research related activities, which included a feasibility study on the establishment of a joint bureau of government research, the Miami Valley Project, a faculty data bank, retraining of teachers and administrators, student research on educational innovation, computer terminals for research and instruction, and computer-assisted instruction. Additional material, illuminating individual projects, is included in the appendix. (AF)

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Ten Mid-West Institutions Grouped Cooperatively
To Develop Research Capability

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Dayton-Miami Valley Consortium

Dayton, Ohio

May 1970

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TABLE OF CONTENTS

I	INTRODUCTORY SECTION	1
	A. SUMMARY	2
	B. INTRODUCTION	
	1. Development Activities	5
	2. Research and Research-related Activities	19
	C. METHODS	31
II	FINDINGS AND ANALYSIS	63
III	CONCLUSIONS	67
IV	SUPPLEMENTARY AND APPENDIX MATERIALS	69

1. INTRODUCTION SECTION

A. SUMMARY

This report describes the most significant activities of the Dayton-Miami Valley Consortium during the period covered by the Consortium Research Development Grant, from September 1, 1967 through February 28, 1970. These activities were concentrated in two broad areas -- those of development and research. The number of such activities sponsored by the Consortium office is very large, so that only the most relevant and significant are reported here.

The organization within the Consortium for conduct of these activities included the appointment by each member institution of a Research and Development Officer, who devoted up to fifteen percent of his time to Consortium activities. These individuals are listed in the appendix. The Consortium R & D officer was responsible for the stimulation and coordination of research activities within his institution, and for maintaining liaison with the Consortium Project Director. The R & D officer reviewed research proposals, provided guidance and research design and methodology, and information on research opportunities for individual faculty members. Most such officers published regular bulletins for faculty members, listing research opportunities and providing necessary information to assist faculty members in the preparation of proposals, etc. The R & D officers also provided liaison between their institution and the Consortium office. The R & D officers met regularly with the Consortium Project Director as a group to coordinate activities and to insure that information on Consortium plans and programs could be regularly transmitted to their colleagues within their own institutions.

Specific Consortium projects and activities were carried out in a variety of ways, but primarily through Consortium research teams, task forces, and committees, consisting of appropriate faculty members, and in some cases students. Generally the Consortium Project Director met with these groups on a regular basis and provided technical support and assistance for such group activities.

1) Development Activities

- a. Computer Services and Activities
- b. Cross-registration, course consolidation, and faculty exchange
- c. Library activities and programs
- d. Learning resources circuit
- e. Educational television
- f. Interinstitutional working committees, including Registrars, Business Managers, Financial Aid Officers, Institutional Research Officers, Chief Academic Officers, Student Representatives, and Faculty Representatives
- g. Joint community service activities, including Dayton Urban Corps, VISTA, Headstart Supplementary Training Program, Model Cities Programs, and Talent Search
- h. Area Studies, including African and East Asian

2) Research and Research-related Activities

- a. Function of R & D officers in stimulating individual research projects in their own institutions
- b. Feasibility study on establishment of a joint bureau of government research; and later related developments, including urban studies and research, public opinion polling, and use of census data
- c. Miami Valley Project
- d. Faculty data bank
- e. Retraining of teachers and administrators
- f. Manpower proposal
- g. COSIP proposal
- h. Student research on educational innovation
- i. Computer terminals for research and instruction, and computer-assisted instruction

1. Development Activities

Computer activities brought the advantages of a wide variety of computer services to many member institutions at relatively low cost, in situations where such services had not been available before. Cross-registration, course consolidation, and faculty exchange provided enrichment of programs for students, particularly in the smaller institutions, and there is evidence that course consolidation and faculty exchange will be the solution to preservation of many subject areas in the smaller institutions, which might otherwise have to be eliminated. Library activities have brought the advantages of the total collection of all institutions to immediate availability to all Consortium students and faculty. A centralized collection of expensive materials is being developed for use by all institutions and work is progressing on a Union Catalog. The third edition of the Union List of Serials is now in process of preparation. Unnecessary duplication in library materials is being avoided by careful advanced planning and cooperation. The Learning Resources Circuit, involving audio-visual materials, has great potential and has already demonstrated economy in sharing of films and film strips. Educational Television is rapidly becoming a reality for the Dayton-Miami Valley area under the direction of Wright State University, with programming support from all other Consortium institutions. The institutional working committees have effected improvements in administrative procedures, looking to economy of operation, have helped to broaden and enrich student curricular programs, have built on existing strengths within Consortium institutions, and helped to minimize institutional weaknesses. Joint community service activities are growing rapidly in size and number, and are producing a very well-received impact upon the broad community, and particularly the urban area of Dayton. Area Studies have been developed successfully in the African and East Asian area, stimulating interest in exploring other area possibilities.

2. Research and Research-related Activities

Institutional R & D Officers have helped to stimulate greater individual faculty participation in research, particularly in some of the smaller developing institutions. The Feasibility Study on the Establishment of a Joint Bureau of Government Research has demon-

strated the need for such services in the Dayton-Miami Valley area and positive steps are now being taken toward the development of a broadly-based center for urban studies and research. The Miami Valley Project has stimulated faculty participation in research areas affecting the entire project, particularly environmental problems. The Faculty Data Bank includes seventy-five percent of all faculty members of Consortium institutions and, through the use of a coding system developed by the Consortium office, the information is readily retrievable from IBM punch cards, covering a wide variety of faculty characteristics, for use internally within the Consortium and externally for a variety of community service activities. The Retraining of Teachers and Administrators proposal provided opportunity for faculty members of all Consortium institutions to work in the formation of a comprehensive pilot project for changing of attitudes on the part of teachers, administrators, school board members, and parents of disadvantaged children. Development of the Manpower proposal demonstrated, as a result of conferences with community leaders, the great need for more effective curricula in manpower training, research and services in the Dayton-Miami Valley area. The COSIP proposal brought together faculty members of chemistry departments of five institutions in a cooperative planning program, and demonstrated the large opportunity for strengthening of science departments in small institutions through cooperation and the sharing of expensive equipment with access to computer services. The Student Project in Educational Innovation has already developed an extensive library of materials on curricular reform, and promises to provide material for a major Consortium study of curriculum revision during the coming year. The availability of computer terminals to smaller institutions for research and instruction purposes has provided stimulus to students and faculty to undertake research problems, and the activities of the Consortium committee on computer-assisted instruction have created increasing interest in the use of computers for instructional purposes on many member campuses.

In conclusion, the development and research-related activities of the Dayton-Miami Valley Consortium, during the past two and one half years, have moved Consortium institutions measurably toward completion of their basic objectives.

B. INTRODUCTION

1. Development Activities

1a) Computer Services and Activities

One of the major objectives of the Consortium, as contemplated by the Trustees from the conception of the Consortium and as set forth in the original proposal for the Research and Development Grant of the U. S. Office of Education, has been the development of computer services for all members of the Consortium, particularly aimed at providing to the smaller institutional members, at reasonable costs, computer services in all the various areas of administration, education, and research. In the case of many of our members, prior to the inception of this program, no computer activities existed on their campuses.

The Consortium program began with development of plans in early 1968 to use the resources of the McCall Information Services Center at the University of Dayton, which was then operating a large computer facility involving several computers in the IBM/360 series in various configurations. During the calendar year 1968, MISCO offered a total of twelve hours of free computer time to each member institution of the Consortium, as its contribution toward the program.

The first activity in this area undertaken by the Consortium was sponsorship in conjunction with officials of MISCO of a series of colloquia and seminars, designed to familiarize faculty and staff members of Consortium institutions with the various kinds of computer services available, and help them to determine how to make most effective use of the contributed time. During calendar year 1968 the following activities were sponsored by the Consortium:

1. A Computer/Users/Programmers Workshop, held at the University of Dayton on March 20, 1968; attended by approximately sixty-five administrative officers, faculty, and students of member institutions. Discussions of the three broad areas of computer services were led by experienced individuals and were designed to assist Consortium representatives in the most effective use of computer time.
2. In conjunction with the Association on Computing Machinery, a seminar on computer-assisted instruction, conducted by a nationally known authority, Dr. Gloria Silvern, University of California at Los Angeles, was held on April 26, 1968. A total of forty-seven individuals, representing nine member institutions and several of our associate members, attended the seminar, costs of which were defrayed by the DMU office.
3. A colloquium on computer library applications was held at the University of Dayton on Tuesday, May 7, 1968, conducted by Dr. V. E. Giuliano,

Dean, School of Information and Library Studies, State University of New York at Buffalo. Dean Giuliano's lecture topic was "Knowledge Transfer in the 1970's". The colloquium was attended by forty-one individuals, representing faculty and library staffs of all Consortium institutions and two associate members.

4. A Registrars' colloquium on data processing techniques for student records was held at University of Dayton on July 24, 1968, attended by a total of sixteen registrars and other administrative officers representing ten of our member institutions. The colloquium was conducted by Mr. John Bremer, President, and Mr. Allan Kennedy, of Systemation, Inc., Boston, Massachusetts. The Registrars appointed a special committee, chaired by Mr. Robert Donovan, Registrar of University of Dayton, to review proposals and ideas discussed and to recommend further action, leading to the possible development of a single registration computer package for all interested member institutions.
5. A seminar on computer time-sharing and computer-assisted instruction was sponsored by the Consortium during the week of August 19-23, 1968, at the University of Dayton. This seminar was planned and directed by Professor Lawrence A. Jehn of Computer Science Department, University of Dayton, and more than thirty faculty members representing eight Consortium institutions participated during the entire week. Sessions involved lecture and discussion periods, led by a number of Consortium faculty members and guest speakers, including Dr. William Luebbert of the U. S. Military Academy and Dr. Glenn Atwood of the University of Akron. CAI programs were demonstrated by the speakers, utilizing computer terminals and facilities provided without charge by CAL-COMP, CONSHARE, EAI, IBM, General Electric, MISCO, and RCA. Members of the seminar were also afforded the opportunity to make extensive use of computer time-sharing systems, gaining experience in applications to their fields of interest. (See appendix for announcement of program.)
6. An unusual kind of colloquium was arranged through the cooperation of Major General E. A. Pinson, of Air Force Institute of Technology, and the U. S. Air Force, in which twenty-five faculty members representing all institutions of the Consortium spent the period August 26-28, 1968, visiting the Air Force Academy in Colorado Springs. The group toured the installation and conferred with their counterparts of the Academy faculty, observing and discussing various uses of the computer in the classroom as developed by the Academy. The Consortium office defrayed per diem expenses of the group, who thus had the unique opportunity to observe means of adapting some of the newest techniques of

computer-assisted instruction to their own classes at their home institutions.

7. A time-sharing seminar for interested faculty and staff members of Consortium institutions was conducted by MISCO on December 5, 1968, during the course of an afternoon when live demonstrations of remote terminals were conducted. The seminar was attended by approximately twenty-five representatives of six Consortium institutions and was designed to be of assistance to those in institutions using time-sharing terminals for the first time.

Early in the calendar year 1969, the University of Dayton terminated its contract with McCall Information Services Company and acquired a new third generation computer, RCA Spectra 70/46 with time-sharing capability. The facilities of this new computer system, the first installation in an academic institution, were intended to be made available to all members of the Consortium.

In order to familiarize interested faculty and staff members of DMVC institutions in the new RCA Spectra services, the University of Dayton conducted a series of colloquia and seminars during the early part of calendar 1969 as follows:

- March 19, 1969 - Dr. John F. Lubin, Professor of Industry, Wharton School of Finance, University of Pennsylvania, on Computer Simulation, Theory of Management, and Theory of the Firm.
- March 28, 1969 - Mr. Robert J. Anderson, Professor of Industrial Engineering, Texas A & M University, on the use of computers in research, in education, business, English, and humanities, geology and geophysics, testing and counseling.
- April 18, 1969 - Dr. Richard Barrutia, Professor of Languages, University of California, Irvine, on the Use of Computers in Foreign Languages.
- Late April, 1969 - Dr. Brice Carnahan, Professor of Engineering, University of Michigan, on Computers in Engineering Education.

The Committee of Registrars appointed earlier by that group, under chairmanship of Mr. Robert Donovan, Registrar of the University of Dayton, spent a good deal of time in meetings to work on possible development of a Consortium-wide program of data processing for student records. University of Dayton provided leadership in this field, being well along toward an integrated system of data processing for student records covering admissions, financial aid, registrar's office, alumni office, and fund development.

During the latter part of calendar 1969, the University of Dayton, as it was able to move the RCA Spectra into more complete operation, provided information and other services to all interested members of the Consortium on rates and programs for computer use, particularly in the administrative area. As a result, several member institutions contracted with the University of Dayton for batch processing of administrative data.

1b) Cross-Registration, Course Consolidation, and Faculty Exchange

During the summer of 1968, in cooperation with the Registrars of Consortium institutions, arrangements were made for full-time students under certain conditions to register for credit in courses at other Consortium institutions at no additional charge, on a space-available basis. A special registration form was designed for such registrations (see appendix) and the program went into operation at the beginning of the fall 1968 term. A total of fifty-five students took courses at different Consortium institutions during this academic year.

During the academic year beginning in September, 1969, a new feature was added, in which a series of Consortium night courses on member campuses was arranged whereby certain courses were offered in the evening only, once a week for full credit, to make it easier for students to take advantage of the program in view of the problems of scheduling and travel. A total of fifty-nine students enrolled in the evening courses during the first term and during daytime hours a total of sixty-four students registered, for a grand total of one hundred twenty-three cross-registrations. During the second term of this academic year, a total of one hundred and two DMVC students were enrolled in Consortium night courses and regular daytime cross-registration.

The chief problems for students interested in cross-registration are that of the differing academic calendars of member institutions, and that of transportation for those students who do not have cars. Nevertheless the cross-registration program offers an opportunity, particularly for students in smaller member institutions, to enrich their programs by enrolling for courses in the larger institutions where there is a wider variety of course offerings.

Cross-registration is also being studied as a means of helping to alleviate the problem of unnecessary duplication of courses, particularly at the upper division level where low enrollments are a problem for individual institutions. At the request of the Chief Academic Officers of the DMVC, the Consortium office obtained information from all institutions on problem areas of low course enrollments, especially at the upper division level. Quite consistently, throughout member institutions, low course enrollments are problems, especially in the physical sciences and in foreign languages. As a result, meetings of the departments involved are being scheduled by the DMVC office to explore ways and means of course consolidation with student cross-registration. Such an arrangement has already been made between Wilberforce University and Central State University, with the

latter providing most of the upper division physics and chemistry courses for Wilberforce students.

Another study, commissioned by the Chief Academic Officers, will involve foreign language departments to explore possibilities of faculty exchange on a part-time basis within Consortium institutions to alleviate problems of insufficient course loads, and thus help to maintain particular areas within individual institutions, particularly in some of the more special or less popular foreign languages. Appointments of faculty members in these areas by two or more institutions will also be considered.

1c) Library Activities

Organization of the DMVC Library Division on an informal basis actually antedated the formation of the Consortium itself. During the year 1968, the Consortium Librarians developed and approved a set of By-laws for the Library Division, electing officers and committees to carry on their activities. The By-laws and organization were subsequently approved by the Board of Trustees of the Consortium. The Executive Committee of the Library Division meets regularly monthly.

During the period under review, the following activities and projects are noteworthy:

1. Completion of a computer printout of periodical holdings in all Consortium libraries, plus the Dayton Public Library and about thirty special libraries in the Miami Valley area -- a Union List of approximately twenty-five thousand journal titles. One year later a second edition of the Union List of Serials, including approximately twelve hundred more titles than the first, was completed, with some financial assistance from the Consortium office. Publication of the first list of serials made it clear that there existed large gaps in the periodical resources of Consortium institutions. Consequently, on recommendation of the DMVC Library Division, the DMVC office employed Mrs. Rachel Tanner, formerly Librarian at Wilberforce, to edit the list, to make recommendations to the libraries for the consolidation of fragmented holdings, and to assign responsibility for completing the holdings of important titles. This study has been of great use to the Librarians.
2. Completion of library profiles for each Consortium library, including library holdings and personnel, present capacities and plans for academic and professional growth in the next ten years, to provide a basis for cooperative buying and building of library resources so that expensive duplication may be avoided (see appendix for the report of this study).
3. Completion of simplified methods of loaning library materials between libraries and students and faculty.

Under present arrangements, students and faculty of any Consortium institution may borrow materials from any other Consortium library. Originally the problem of physical pickup and delivery between Consortium institutions was a large one but during the academic year beginning in the fall of 1969, arrangements were completed by the libraries to use United Parcel Service (UPS) for this purpose and twenty-four hour service is now provided.

4. Another problem encountered by the librarians was the relative inconvenience of telephone communication to enable greater use of joint resources, and a study was undertaken by the librarians to review the feasibility of teletype communication. As a result of studies by the Librarians Committee on Technology, four institutions have now installed TWX equipment for the purpose of expediting interlibrary loans.
5. The Library Division early in 1969 commissioned a study of the duplication of resources in Consortium libraries, which was completed in October, 1969. The report indicates that the extent of duplication is much less than anticipated (less than 25%) and that the total resources in the area may exceed 500,000 separate titles, the equivalent of some major universities.
6. The most important event of calendar 1969 for the Library Division was the award to the DMVC of a Special Purpose Type C Grant from the U. S. Office of Education in the amount of \$100,000. The funds are being divided equally for joint purchases and for individual purchase of unique items, such as the Calendar of State Papers, Bibliography of Doctoral Research on the Negro, and others of joint interest.

The second half of the \$100,000 will be divided among member institutions in proportion to available matching money from each library budget. In addition, the DMVC Library Division voted to assess each member an amount equal to one percent of its book budget for 1968-69, to be used for additional centralized purchases and for operating expenses of the division. Wright State University has made available shelf storage for little-used materials in the libraries, and in addition joint purchases under the Special Purpose Library Grant will be housed in this collection for ready accessibility to all member institutions.

1d) Learning Resources Circuit

Early in calendar year 1968 an interinstitutional committee was appointed to make a survey of existing audio-visual instructional materials among Consortium institutions. Ultimate objective was the establishment of a central facility to house and distribute a collection of various audio-visual materials of high cost but

relatively low density use. One of the by-products of this study was the publication of a partial catalog of films owned by Consortium institutions and available to all members. The Air Force Institute of Technology transferred its film collection to the Consortium on an indefinite loan basis, with many of the titles being immediately available to all members of the Consortium. There is great need for increasing the film collection to a much more adequate level for maximum usefulness. Present materials are being exchanged among member institutions through similar arrangements as were made for library materials.

1e) Educational Television

In January 1968, an interinstitutional committee of appropriate faculty and staff members of DMVC institutions was appointed to study and investigate the possibility of developing educational television and instructional television for DMVC institutions and for the Dayton-Miami Valley area. An engineering survey of an existing 410 foot TV-radio antenna in Yellow Springs was commissioned by the DMVC office to determine its feasibility as a possible source for the use of 2500 Megahertz TV Broadcast for instructional purposes among Consortium institutions. Results of the survey were positive. Later in the year the Consortium acquired an option on approximately eighteen acres of property containing the antenna, in order to prevent its loss by private sale. Various possibilities of cooperation in educational TV with the Miami Valley Educational Television Foundation, the Public Schools of the area, and other agencies were investigated.

During the 1969 Session of the Ohio Legislature, funds were voted to the Ohio Board of Regents for the establishment of new ETV facilities in the State. When this occurred, the DMVC committee, in consultation with local and State authorities, recommended that Channel 45, designated as the Dayton area ETV channel, be activated with Wright State University as the operating agency, with support in programming and in other possible ways by the remaining members of the Consortium. Subsequently, Wright State University acquired the antenna and property near Yellow Springs which previously was under option to the Consortium. The Project Director, with the assistance of a Technical Engineering Consultant in Yellow Springs, provided technical information and other data concerning the tower and related equipment for ETV operation.

Finally, early in 1970, the Ohio Board of Regents allocated a total of \$565,000 for the development of a UHF-ETV station in Dayton, designating two DMVC member institutions, Wright State and Central State, with the cooperation of Miami University in Oxford, Ohio, as the licensees and operators. It is anticipated that activation of Channel 45 will now proceed. Early in 1970 also, the University of Dayton acquired a new fully-equipped black and white mobile TV unit as a gift from local station WHIO-TV. The University has indicated that the unit will be available for unusual programming for Channel 45.

Although a new antenna in the Dayton antenna farm will be developed for Channel 45, the DMVC will continue to study the possibility of using the antenna in Yellow Springs, now the property of Wright State University, as a means of direct point-to-point broadcast of instructional television programs for DMVC institutions.

1f) Interinstitutional Committees

1. Financial Aid Officers

Beginning in June 1968, Consortium Financial Aid Officers held regular meetings under sponsorship of the Project Director to discuss a variety of matters of general interest. Subsequently, monthly meetings were arranged to keep all officers abreast of current developments and to help maintain the best possible assistance to students of Consortium institutions. A meeting was arranged with Miami Valley Personnel and Guidance Association of the High Schools, involving area high school counselors, where a presentation was made of the total financial aid opportunities for all prospective college-bound students. During the summer of 1969, the Financial Aid Officers acted as a supervisory committee for the Dayton Urban Corps and summer VISTA Program, reporting to the Project Director (see below for detailed description of Urban Corps and VISTA).

2. Business Managers

Business Managers of all Consortium institutions met initially on September 24, 1969, to discuss matters of mutual interest, and agreed to meet on a regular basis in the future. Items discussed at that meeting and subsequent ones included Union contracts and problems, joint purchasing, space utilization, planned program budgeting, long-range financial planning, and campus security. A study has been initiated to determine the feasibility of joint purchasing. Information on Union contracts has been exchanged among all member institutions, as well as regulations governing non-academic employees. A meeting in December 1969, at Air Force Institute of Technology, provided Business Managers with an expert technical analysis of the planning, programming, and budgeting system of the Department of Defense (PPBS), and subsequently Business Managers are studying ways in which many aspects of this system can be adapted to college and university business operations.

3. Institutional Research Officers

After an initial meeting on March 13, 1969, primarily for exchange of information and general

acquaintance, the DMVC directors of institutional research have met on a fairly regular basis during the remainder of 1969 to develop means of sharing basic institutional data through the DMVC office. The primary vehicle for this information has been determined to be the information provided for the Office of Education's Higher Education General Information Survey (HEGIS), including institutional characteristics, students, faculty, financial statistics, library statistics, and projections. Additional data is also being included.

4. Chief Academic Officers

The Chief Academic Officers of Consortium institutions met initially on October 15, 1969, and have been meeting regularly since that time. The committee has reviewed the problem of small class sizes in many institutions, particularly in the upper division, and commissioned the DMVC office to collect information on these problems (see discussion under cross-registration, course consolidation, and faculty exchange, item 1b above). The Academic Director of Air Force Institute of Technology reported that research facilities at AFIT, particularly the nuclear engineering center, can be made available to faculty of DMVC institutions for research activities, and provided information to member institutions on the availability of these facilities.

The committee also commissioned the DMVC office to collect information on particular institutional areas of strength and special interests. This information was reviewed at a meeting of the committee in March 1970, where it was apparent that there is relatively little overlap in these items, and that there are very strong possibilities for enrichment of student programs by sponsorship of more extensive student cross-registration. A task force subcommittee was appointed to review all of the information provided, to analyze the implications for a Consortium approach to making the best use of these resources, and the study will continue in the future.

All of these studies look to the development of a long-range Consortium master-plan of academic development, in which each institution will designate its own particular role, so that unnecessary duplication may be avoided and appropriate advantage taken of the individual institutional areas of strength, special interests, and programs. Such a plan would preserve individual institutional differences and special interests, yet attempt to avoid duplication of programs or courses where such can be profitably avoided. In some areas consolidation of courses and programs and the division of labor among

the DMVC institutions can work to mutual advantage and economy. Such an overall master-plan would then be used to provide necessary guidance for library purchases, equipment purchases, determination of personnel needs, and a great variety of related activities.

5. Student and Faculty Consortium Advisory Committees

A student advisory committee for the Consortium was formed early in 1968, consisting primarily of representatives of student government from each of the member institutions. This committee met regularly during 1968 and on into 1969, to acquaint members with all of the Consortium institutions and to arrange joint planning for block booking of student-sponsored lectures and other activities. The committee also investigated the development of adequate means of intercommunication among student bodies and to promote student interests in the Consortium. The student committee was also of material assistance in helping to man registration desks on the different campuses for the Consortium cross-registration program. A faculty advisory committee, consisting of elected representatives from each of the faculties of the Consortium institutions, was organized later in 1968, and agreed to function in an advisory capacity to the Project Director and to the governing body of the Consortium on matters affecting faculty interests. Subsequently, these two committees cooperated with the Project Director to sponsor a Consortium-wide conference on the developing role of students in the governance of higher education, which was held on April 19, 1969, at Wright State University. Approximately one hundred students and faculty of Consortium institutions participated in a plenary session and group discussions, which extended throughout the entire day. (See appendix for program.)

1g) Joint Community Service Activities

In the conviction that especially in these times of urban crisis and increasing community problems, all universities -- public and private -- have a large obligation to seek the most effective ways to serve their communities, the Consortium since its inception has mounted a major effort in the development of and related research in (see Section 2 below) various areas of community service. The most significant of these activities are reported here:

1. Dayton Urban Corps

This program, organized in 1968, was the second in the nation, being modeled on that of New York City (there are now approximately thirty-seven Urban Corps organizations in cities of the United States). The purpose of the program is to provide work-study opportunities for college students, particularly Black students, to work in various agencies in the inner city, providing

them with first hand knowledge of some of the problems of the inner city, and to give assistance to the agencies served. Hopefully, the program will also help to interest young college graduates, particularly Blacks, into undertaking careers in the urban field. During the first summer of operation in 1968, approximately thirty work-study students from Wilberforce University were assigned to jobs in a pilot program to determine the effectiveness of the undertaking. Later that summer a meeting was arranged through the Consortium office of Presidents and other officials of eight Consortium institutions, which had or were developing work-study programs. There was enthusiastic response on the part of institutional officials to the idea of the Urban Corps. Subsequently, the institutions involved made application for increases in work-study funds from the U. S. Office of Education, and with a strong letter of endorsement from the Consortium office, were uniformly successful in receiving substantial increases to make possible participation in the Dayton Urban Corps.

During the summer of 1969 approximately one hundred and thirty-five students, from eight Consortium institutions (Antioch, Central State, University of Dayton, Sinclair, Wilberforce, Wilmington, Wright State, Wittenberg) were placed in a variety of jobs in public and private agencies in the City of Dayton, providing much needed assistance to a total of sixteen different agencies (see appendix for listing). The program was uniformly successful and very gladly received by the cooperating agencies, which urged that the program be expanded and continued on a year-round basis. Subsequently, the Trustees of the Consortium, believing in the value of the program for the students and institutions involved as well as for the agencies served, voted to approve the establishment of this program on a year-round basis, and to support in the office of the Consortium a full-time coordinator of community service activities, to supervise this program and others of a similar nature. It is anticipated, for example, that similar work-study or volunteer programs will be developed to serve other parts of the Consortium region beyond the Dayton urban area.

2. VISTA

During the summer of 1969 the Consortium sponsored a VISTA Summer Associates program, under which a total of approximately thirty volunteers, many of whom were students of DMVC institutions, were assigned to a variety of jobs in the Dayton area (see appendix for list of agencies). Within the framework of its objectives the program was successful, although there were a number of deficiencies in program design which the Consortium decided to remedy. Subsequently, the

Trustees agreed that the VISTA program should also be continued on a year-round basis along with the Urban Corps, and application was then made to the Office of Economic Opportunity for such a program. Although the action fell outside the period covered by this report, it is of interest to note that a regular year-round VISTA program, involving initially sixteen volunteers, was approved under the sponsorship of the Consortium in April 1970, and it is anticipated it will be expanded to a total of approximately forty volunteers during the coming fiscal year. The current VISTA program is a grass-roots project, having been developed in consultation with leaders of the urban poor, school administrators and other community representatives, who serve as a governing board. It will focus on the development of two food-buying cooperatives for East and West Dayton inner-city residents, cooperation with the Union Settlement House of Springfield in an isolated poverty pocket, and coordination of community programs for two inner-city schools.

3. Headstart Supplementary Training Program

The DMVC was one of the first agencies in the nation to be funded under this new program, which is designed to train staff personnel for full-year Headstart Child Development Centers. The proposal, funded through the Office of Economic Opportunity in the amount of \$22,315 began operation in April 1969, concluding in March 1970. Administered through the DMVC office and directed through Sinclair Community College, with the cooperation of Wright State University and University of Dayton, the program provided four sessions for fifty trainees each during the year. Renewal of the contract for another year was recently confirmed.

4. Model Cities Programs

During the past year or so, and especially in recent months, the DMVC Project Director and other representatives of the Consortium have had discussions with representatives of the Dayton Model Cities Program at their invitation to explore ways in which DMVC expertise can be of maximum assistance to their developing programs, as in education, training, evaluation, counseling, and general consultation. In February 1970, preliminary discussions were held concerning the development by the Consortium of a Model Cities Training Institute which would provide short courses, seminars, certificate courses, and regular college credit programs for para-professional, sub-professional, and other staff of the Model Cities, drawing upon the particular strengths and interests of all institutional members of the Consortium. This would be a fairly large program, involving five hundred or more Model Cities staff members per year for a period of approximately five years. It is expected that DMVC will be asked to contract for these services

beginning in May or June, 1970.

The DMVC provided a total of five Consortium faculty members to serve as members of a consultant team in Project Emerge, a major federally-funded project implementing and studying new methods and programs at three Dayton Public Schools in the inner city of West Dayton. The team has met every month since September 1969 with teachers in an effort to improve classroom efficiency through development of self-directedness. Project Emerge is focused locally on Roosevelt High School and Grace A. Greene and Weaver Elementary Schools, and is one of ten such projects in the United States.

Central State University already has an operational program to assist Model Cities education, involving the use of junior and senior sociology and social work majors as elementary children group leaders and assistants to school counselors in a project entitled "Reversal and Prevention of Negative Social Attitudes in School Children". Central State has also been the principal institution working with the Model Cities Educational Staff to develop curriculum and work experience coordination for the School-Centered Career Opportunities Program.

Antioch College and Wilberforce University, with DMVC endorsement, made application in February 1970, for funding for planning studies looking to the establishment of centers in East Dayton and West Dayton, for educational activities in the socially depressed sections of the Dayton urban complex where higher education is seriously needed, and at present is definitely out of reach.

5. Talent Search

In February 1969, the DMVC, through an interinstitutional committee, developed in cooperation with the Dayton Board of Education and the Dayton Model Cities Educational Staff a Project Talent Search Proposal which was submitted to the U. S. Office of Education. Although that project was not funded, interest in the idea continued and early in 1970, with the receipt of new information from USOE on Talent Search, the project was reactivated and the DMVC committee expanded. The proposal was revised and largely rewritten, again in cooperation with the Dayton Board of Education and the Model Cities Educational Component, in accordance with the new guidelines. Purpose of the project is to seek out and counsel economically, culturally, and educationally disadvantaged youths, assist them with college entrance where indicated, and provide special counseling and remedial services after their admission. Recently, the DMVC received a gift from the committee which sponsored

the PGA Tournament in Dayton in 1969 of \$30,000 for use to assist economically disadvantaged youth in meeting college expenses. Thus, if Project Talent Search is funded, this resource in addition to those of individual institutions will be available.

1h) Area Studies

1. African Studies

Beginning on March 21, 1968, at Central State University, this was the first such joint project in Area Studies developed through the Consortium. It was staffed by faculty of Central State University, Ohio University, University of Dayton, and Wilberforce University. It included courses in African anthropology, art, economics, education, history, political science, sociology, and language (Arabic, Lingala, Swahili) and was open at no additional charge for full credit to all qualified regular students of Consortium institutions. The program proved highly successful and has continued with various modifications and curriculum adjustments since that time.

2. Asian Studies

An Asian Studies committee for the Consortium was appointed and began meetings early in 1968, meeting regularly during the year and sponsoring a Symposium on China. The committee maintained close contact among Asian specialists for the exchange of information and experience, made a preliminary survey of Consortium members' resources and needs in the area of Asian Studies, maintained a file of information on Asian Studies programs, federal grants, fellowships, scholarships, conferences, etc., and evolved two proposals -- one for an Asian Studies program and one for a Chinese language program. Although the Chinese language program did not materialize, the committee's work on Asian Studies led to the development of an East Asian Area Focus program at Wittenberg University. This program covers the following areas: Japanese literature in translation; Regional study of the physical, economic and cultural characteristics of Asia; History of the Far East with special attention given to the changes brought about by the impact of the West; in depth study of Communist China; comparative analysis of the political systems of East Asia; study of the development and influence of the religious and philosophical movements of East Asia; Chinese language; seminar in the culture of Japan, which includes travel in Japan and Taiwan.

3. Another Consortium committee on Soviet and East European Area Studies has been meeting sporadically to explore the possibilities of a program in this area, but no final action had occurred at the termination of the grant period.

2. Research and Research-related Activities

2a) Function of R & D Officers in stimulating individual research projects in their own institutions

In some of the well-established older or larger DMVC institutions faculty research has been an ongoing program for many years. In the case of a number of our institutions, however, which are less well-established, or underdeveloped, or newly developing, the stimulation and assistance of individual faculty research has been of great importance, and the institutional R & D Officer has had an important role to play in this respect. To illustrate the development of such activities during the period covered by this CORD grant, four of our member institutions are here reported: Central State University (small, developing, predominantly Black), Wilberforce University (small, developing, predominantly Black), Wittenberg University (medium sized, private, developing), and Wright State University (new, independent only since 1967, rapidly developing). Thus at Central State University, during the period of review, there were twenty-five different research projects covering nine departments; at Wilberforce University thirteen projects in six departments; at Wittenberg University forty-four projects in fifteen departments; and at Wright State University there were thirty-two projects covering nine departments. (See appendix for details on all of these projects.)

2b) Feasibility Study on the Establishment of a Joint Government Research Bureau, and later related developments

Early in 1968, the Consortium Project Director commissioned a feasibility study for the development of a jointly-staffed Bureau of Government Research. The study was conducted by Richard T. Conboy, S.M., a graduate student of the University of Dayton, with professional guidance from faculty members of the University of Dayton and Miami University. Ultimate objectives of the establishment of such a bureau would have been to provide appropriate services to local governments in the Dayton-Miami Valley area, to provide in-service experience for graduate students in the general area of municipal government, and to encourage Black students to train for careers in municipal government. Among other things, the study recommended a co-sponsored bureau in cooperation with the Miami Valley Council of Governments. Discussion between Trustees of the Consortium and representatives of the Miami Valley Council of Governments led to the conclusion that at that time the problem of financing the bureau was too great to justify immediate action. (The complete text of the feasibility study is reproduced in the appendix.)

Interest in the proposal was not dropped, however, and since that time the DMVC office has explored various ways in which some of its objectives might be implemented. It was clear to us that there is an obvious need for such a research activity in this area, and in the months that have ensued since the original decision to withhold launching the bureau, conditions have changed materially, as many of our member institutions

have developed growing interest in a variety of urban involvements and urban studies and research programs. DMVC institutions actively interested in such activities are Antioch College, Wilberforce University, Central State University, University of Dayton, Wright State University, Sinclair Community College, and Wittenberg University. With increasing involvement on the part of DMVC in community service activities, such as have been reported under Section 1 above, it is clear that the development of a full scale Urban Studies Research Center will come in the very near future. For example, during late 1969 and early 1970, the Consortium office has been actively pursuing the development of an agency under its sponsorship for undertaking public opinion polling on issues of current public interest, particularly in the Dayton area. This would involve cooperation with local agencies and the hiring of a professional staff, with actual polling to be conducted by DMVC students under Work-Study funds or under course field-study programs. Critical current issues involving political matters, urban problems, Model Cities, public housing, and the like, would be covered. Large amounts of useful sociological, demological, and economic research data would result for intensive studies by appropriate faculty of DMVC institutions. The project will be financed by foundation and other local funds, and it is anticipated that operations will begin in the summer of 1970. Similarly, the DMVC, in conjunction with a number of local agencies, is reviewing various possibilities for the use of 1970 U. S. Census data for appropriate research studies. This census data for the first time will be available to users in the form of summary computer tapes, which will make possible development of a more timely and comprehensive statistical picture of the Dayton area than ever before available.

As all of these interests and activities come together, we anticipate that a full-scale bureau of governmental research, staffed jointly by faculty members in Consortium institutions, will soon become a reality.

2c) Miami Valley Project

This project, based in Cincinnati, Ohio, is a very broad-scale, long-range, socio-environmental study of the Miami River Valley, combining the studies and research of social, physical, and biological scientists to determine the effect of man on his environment, of the environment on man, and the interactions of man in this environment in one river valley complex. Since its inception the DMVC Project Director has remained in close liaison with its director, Dr. Mitchell Zavon, and members of his staff. Thus on July 2, 1968, the Project Director arranged a meeting with interested faculty representatives and others at the University of Dayton to participate in a review by Dr. Zavon and members of his staff of possible areas of Consortium participation in the project. Twenty-two representatives of faculty and administration of seven Consortium institutions, plus representatives of three associate members of the Consortium attended the meeting. As a result of this meeting, a number of faculty members of DMVC institutions prepared research proposals which were reviewed and

assisted by officials of the Miami Valley Project, many of them to successful funding. A total of twelve faculty members from five DMVC institutions were so involved. (See appendix for further details.)

In early 1970, arrangements were completed with officers of the Miami Valley Project for the DMVC to sponsor a Seminar on Environmental Pollution to be held on April 16, 1970, at the University of Dayton, where Dr. Zavon and three staff members of the Miami Valley Project were scheduled to lay out and discuss specific areas of environmental pollution where research would be particularly productive as part of the total mosaic of the Miami Valley Project. Fields to be covered included water pollution, air pollution, and toxicology, and it was contemplated that once again the Miami Valley Project office will assist interested faculty members in preparing and obtaining funding for appropriate research projects in these areas.

2d) Faculty Data Bank

Early in 1969, the DMVC Project Director undertook a major project of the Consortium, compilation of a Faculty Data Bank. It was contemplated that this bank should include full biographical and professional data concerning faculty members of DMVC institutions, together with information on their special interests and abilities, information on research, consulting, public service activities, and the like, with the object of providing a resource of competence and expertise for use within the Consortium, for assignment to committees, task forces, review committees, study groups, evaluations, etc. Such a bank would also make available, for those faculty members interested, their special interests and talents for a variety of outside consulting research or service activities. An appropriate questionnaire was designed, then sent out with a letter from the Project Director's office to all faculty members requesting their cooperation and promising complete confidentiality of all information provided. (For full details see section on Method and appendix for samples of all materials used.)

Response to the initial mailing was approximately fifty percent, so during the summer of 1969 and early fall, follow-up questionnaires, some what revised, were mailed out again. This brought further replies, bringing the total response to approximately seventy-five percent. During the summer of 1969 a graduate student assistant in the DMVC office alphabetized and classified response questionnaires by institution, and began development of an appropriate coding system. After a number of discussions with officials of the University of Dayton's Office of Computer Activities, we decided against attempting to store the initial information on computer disk or tape, but rather to use a relatively simple punch card system which could then be used to retrieve information through an IBM Sorter. A major decision had to be made as to precisely what information concerning each faculty member would be coded for card punching. Finally it was decided, in the interest of time involved, cost and simplicity,

to code only the major items and information concerning each faculty member, and for such items as research, publication, consulting activity, interest in outside speaking, consulting, community service, etc. to code simply a yes or no. It was agreed that the major function of the punch card should be to make it possible to identify certain basic combinations of characteristics as needed for particular functions or assignments, since the raw data is constantly available in locked files in the DMVC office.

One of the most interesting questions asked of faculty members was to list information concerning their special interests, competencies, and hobbies not related to the professional field. An amazing range of interests and skills was thus discovered, but it was found impossible to devise a coding system for this section.

Coding and card punching was completed in the late fall of 1969, and it is now possible to retrieve information concerning individual faculty members over a wide spectrum of characteristics. The bank has already proved its value many times since then in providing information to answer many requests and questions referred to us from individual institutions or from outside agencies.

The project was completed with a minimum of expense, \$1244. As we gain more experience in the use of the data, we may wish to refine the coding system in more detail and possibly to put the data into computer storage.

2e) Retraining of Teachers and Administrators

Beginning in December 1968, Wright State University on behalf of the Dayton-Miami Valley Consortium was funded by the U. S. Office of Education in the amount of \$7,986 to plan development of pilot project proposal for the retraining of teachers and administrators to meet the needs of socially, culturally, and economically disadvantaged students in the urban school system. Under the direction of Dr. Madeline H. Apt of Wright State University, with the cooperation of faculty and administration of other DMVC institutions, and in collaboration with representatives of the public schools and of the community, a pilot project proposal was developed and forwarded to the U. S. Office of Education during the summer of 1969 requesting funding in the amount of \$182,000 for the first year of the project. As Dr. Apt reported, "the funds provided under the Planning Grant were the means by which the Consortium, the public schools, and the community were enabled to synthesize their thinking and project their ideas, culminating in the production of a pilot project proposal, which we believe represents the urgent needs of education for the disadvantaged. The Planning Project also gave us the opportunity to listen to the community and the public school personnel. The response to the proposed pilot project leads us to conclude that the proposal will fill a vital need locally, the findings of which can be generalized

nationally. The Planning Project demonstrated to us the effectiveness of communicating with all segments of society involved in education. The reaction to the proposal was favorable and we experienced no reluctance to participate by educators or citizens. An additional accomplishment emanating from the Planning Project was the realization that university and college personnel are cognizant of the need for change in educational programs and are desirous of making the change."

The major objective of the proposal was to retrain administrators and teachers so that they will be committed to functioning in disadvantaged area schools and will have the necessary background experiences for effective functioning in the school situation. Emphasis would be placed on the reeducation of administrators, supervisors, and professionals who are in control of schools, such reeducation to be developed among the professionals in the field, the university personnel, the community resources, and the students themselves. The eventual plan was to develop educational personnel who are positively oriented toward the disadvantaged, who care enough about these children to want to teach them, who are convinced that the disadvantaged can learn, and whose expectations include successful academic performance by the disadvantaged child.

The project itself would involve two elementary schools, one from a Black area in the Dayton Model Cities Project, and the second from a White Appalachian area of Dayton, and would include teachers, school administrators, downtown administrators, aides, students, graduates, dropouts, college teachers and parents. In addition, members of the school boards were to be involved in group dynamics sessions to help them develop an awareness of the needs of the disadvantaged student. Parents would have been involved in discussions to help develop an awareness of the need for strengthening positive attitudes towards school and an awareness of the motives of educational personnel.

The planning phase represented the combined efforts of the twelve member institutions of the Dayton-Miami Valley Consortium, and was particularly valuable for faculty and staff members of institutions less experienced in research to participate in the development of the project design. A number of Consortium committees were appointed, including the following: a committee to identify and assess priority needs; a committee designed to identify specific objectives of the pilot project; and committees concerned with assembling and concentrating resources of Consortium member institutions, independent evaluation of project, consultative assistance, dissemination of results, eligibility and selection of participants, work experiences, project staffing, budget, and selection of key personnel. (See appendix for listing of DMVC participants in these committees.)

Although the proposal as planned was primarily a training project, the operation phase of the program would have involved significant research and evaluation procedures directed

toward the following questions:

- . What are the needs of children, their deprivations?
- . What do we know about conditions of insufficient learning and individual development that can be described as pervasive?
- . What are related in-school regimens of accepted practices which inhibit?
- . What concepts of adequate educational objectives and programs will guide the retraining work with teachers and administrators?
- . What argument or study data can be used to support the contention that teachers and administrators in inner city schools do expect too little from their pupils?
- . Are there prevailing student-teacher equational concepts which restrict learning and are especially limiting in inner city schools?
- . What salient current questions and topics which yield to interdisciplinary analysis would enliven and illuminate the need for attitudinal and expectation change?

Finally, the project as conceived would have involved the university community directly in the activities of the larger community during the life of the project, on the assumption that the educational institution includes not only the public schools in the ghetto areas and urban system of which they are a part, but also the schools which train the teachers. Hence it was conceived to be imperative that there be close cooperation between the universities and the school districts, especially in urban areas. Such involvement would necessarily lead to drastic changes in university and college curricula for the preparation of teachers. Hence it was anticipated that a large number of appropriate faculty members in Consortium institutions would have been involved over a three-year period in intensive research and evaluation of the objectives, procedures, and substantive subject matter areas of the project. It was planned to include in these activities significant numbers of faculty of DNUC institutions which have had less experience in educational research and evaluation.

2f) Manpower Proposal

Beginning in November 1969, a Consortium planning committee, consisting of representatives of all Consortium institutions, and under the leadership of Wright State University, began development of a comprehensive proposal involving a center approach to manpower problems by university systems designed to establish within the DNUC a Manpower Research and Education Center which could:

1. Foster both basic knowledge and operational research.
2. Develop curriculum and learning opportunities for students and faculty to increase the output and concentration of manpower specializations.

3. Bring together -
 - 1) Consortium resources of faculty, students, and knowledge accumulations,
 - 2) Area community people and their problems definitions, and
 - 3) The employers and agencies which deal with the problems.

The interconnecting to be done in such a way that a more systematic, comprehensive, and cogent community force for problem attention and solution would be operating and progressively effective.

It was contemplated that at the end of four years the ultimate product of the proposal would be visible and fruitful as a combination of resources, organizations, and operational methods (communication and factor interrelationships) which would be producing increasing amounts of applicable problem-focused research, more effective community-wide cooperation and cross-resource utilization, current data accumulations and distribution and maintenance, and strengthening of an interinstitutional curriculum in manpower for undergraduates, graduates, and community adults. The proposal was developed in consultation with appropriate community leaders, representing a variety of public and quasi-public agencies involved in manpower problems.

A total of sixty-two faculty members, representing nine colleges and universities of the DMVC, agreed to constitute the beginning resource pool from which a more concentrated emphasis on manpower problem understanding and area action could be stimulated. It was recognized that the need is to bring about a definite and growing identification of such faculty and students with the purposes of the DMVC Manpower Center, to cause them to think and act as members of the Consortium resource center and to find ways to support those research, teaching, and community service ambitions which would have the greatest impact on real problem understanding and solution.

The long-term interest of the Consortium proposal was to achieve a maximum interinstitutional impact and effect on the amelioration of area manpower problems, through better organization and more concentrated support of faculty and student research and study, student experience-grounded learning and a more efficient, reciprocal, mutual-interest collaboration with area manpower agencies and the community populations which require economic upgrading.

The proposal was completed and submitted to the U. S. Department of Labor on November 28, 1969.

2g) COSIP Proposal

Early in 1969, a Consortium committee, consisting of representatives of the chemistry departments of five institutions -- Cedarville College, Central State University, Wilberforce University, Wilmington College, and Wittenberg University -- with the active cooperation and participation of the Project Director, began develop-

ment of a proposal to the National Science Foundation under the College Science Improvement Program (COSIP). The proposal, requesting \$215,000 from National Science Foundation, was submitted on October 10, 1969. Although subsequently the proposal was not funded, officials of NSF have requested us, in consultation with them, to revise and resubmit the proposal on the next submittal date, which it is contemplated will be done.

Purpose of the proposal was to improve undergraduate science education in each of the five DMVC institutions. Since none of the cooperating institutions offer advanced degrees in the sciences, their major concern is to offer a quality curricular program so that they may furnish graduate schools, industrial laboratories, and secondary school systems with students who have been trained in the modern developments and basic skills in science, and who have acquired an enthusiasm for scientific inquiry. The proposal requested funds for the purchase of equipment which none of the individual institutions could hope to fund in the near future because of their limited budgets. The sharing of this equipment, materials, and training would permit each institution to upgrade and broaden its research and laboratory training of students.

The cooperating institutions requested funds to purchase computer terminals at each institution, a nuclear magnetic resonance spectrometer, a mass spectrometer, and transportation funds to cover the expense of transporting students to the various schools in order to attend workshops and seminars pertaining to the instruments being requested in the proposal. These instruments would complement those which are now available to the institutions involved.

Since the formation of the Dayton-Miami valley Consortium, the Chemistry Departments of the five institutions concerned have worked in cooperation and developed closer communication concerning chemical education, resulting in an exchange of ideas on how to best serve the science student. Through the leadership of the Consortium, these departments which are in close proximity to each other have evolved a plan of cooperation which would maintain the autonomy of each department, but which would give each department access to more modern equipment. In addition to the needed equipment, the acquisition of terminal facilities to provide access to a major computer on a time-sharing basis would provide heretofore unavailable opportunities for instruction, problem solving, and research for both faculty and students through use of high speed computer facilities. The two instruments requested are of major importance in research, and all cooperating departments have encouraged their students to engage in research, while several departments have active research programs going on continuously.

The understanding and application of computer technology to the field of science is well documented by its value to new adventures in science. The role of computer activities in undergraduate education has been expanded by the demand for students who are

knowledgeable in computer technology. In order for the student to realize his potential in the future scientific world, he must have a basic understanding and working knowledge of computers. In chemistry the sophisticated theories and complex mathematical developments require computer use and students must learn to use these methods. The availability of time-sharing computer facilities to the five institutions would provide opportunity not only for students and faculty in chemistry to use such facilities but also for other departments in the five institutions which have similar scientific interests. Each department intends to develop the use of the computer to the extent that the chemistry major would view the computer as another instrumental technique for the solution of chemical problems. Methodology proposed for the use of the two scientific instruments and the computer terminals is described in a following section.

2h) Student Research in Educational Innovation

Last fall a committee of students of the University of Dayton, headed by the Educational Vice President of the University of Dayton Student Government, and with active faculty support and guidance, began work on a project of Educational Reform and Innovation for the University of Dayton. As the committee developed its project it came to the conclusion that extensive information concerning educational innovation and reform among all Consortium institutions was a necessary part of the project. In January 1970, the committee requested some financial support from the DMVC office to carry out this part of the project. After review of the committee's written proposal, and in consultation with appropriate faculty, the Consortium Project Director agreed to underwrite some of the expenses of the project in the amount of \$600, in view of the quite extensive support being provided to the total project by the University of Dayton Student Government in the amount of \$3600.

Since that time the committee has been visiting Consortium institutions, carrying appropriate letters of introduction from the DMVC office, to gather information on innovative academic programs, new methods of teaching and learning, different grading and credit systems, Black Studies, cooperative projects, multi-media learning centers, and ways in which institutions can best extend themselves into the community.

One purpose of the project is to establish an Educational Resource Center at the University of Dayton for use by all Consortium institutions. As of the conclusion of the period covered by this report, a fairly extensive library of reference materials had been collected. (See appendix.) It is anticipated that the first stage of the project -- the information gathering aspect -- will be completed by August 1970. Thereafter it is the intent of the U. D. student committee to request appointment by the DMVC of an interinstitutional committee of interested students and faculty to evaluate and analyze all of the educational materials collected, and to undertake appropriate research studies into the possible development of innovative curricular programs for use in part or in whole by any interested

member institution. Outside of the Consortium-sponsored part of the project, the committee is also gathering extensive information from other institutions throughout the United States, all of which will provide additional input into the projected Consortium study during the coming academic year.

21) Computer Terminals for Research and Instruction, and Computer-Assisted Instruction

As a part of the overall DMVC project to develop computer services for all members of the Consortium, particularly aimed at providing to the smaller institutional members at reasonable cost computer services in all the areas of administration, education, and research, as described under 1a above, it was conceived to be particularly important to make time-sharing remote terminals available to these smaller institutions as the most economical means of providing them with computer services. Early in March 1968, a remote terminal was established at Antioch College connected with time-sharing equipment in Pittsburgh, and later in the year several remote terminals were established at the University of Dayton. Then the DMVC Project Director proposed to several of the smaller institutions a "package deal" whereby through McCall Information Services Company, for a total cost of approximately \$1000, a remote terminal would be set up on the campus for a month and connected with telephone lines to a time-sharing computer in Chicago, providing about seventy-five hours of connected terminal time. Such a plan made it possible to give a good introduction to computer programming for approximately twenty students on each campus, with additional time available for faculty and research use. To "seed" the project, the DMVC office provided half of the cost of this package for any interested institution. As a result, remote terminals were established at Cedarville, Wilberforce, Central State, Wilmington and Sinclair. All of the institutions involved except Central State continued to use the terminal after the one-month package deal expired, and in fact these terminals are still in operation. Later, Antioch College added two more terminals.

Although these terminals were certainly not used exclusively for research, nevertheless we know that a good deal of time on the terminals is being used for problem-solving in a variety of curricular areas, and for familiarizing both faculty and students with the use of this tool in a variety of research areas. Since 1968 several additional institutions have installed small capacity computers on their own campuses, e.g. Wittenberg, Central State, and Wright State.

Computer-Assisted Instruction

The DMVC committee on computer-assisted instruction was an outgrowth of the seminar conducted by DMVC in August 1968, described in item 1a5 above. The interest generated by this week-long program stimulated requests from all participating institutions for the formation of a research and study committee on CAI. Consequently, in February 1969, the DMVC Project Director appointed such a committee, representative of all member institutions. (See appendix for listing of membership) In recognition of the fact that computer-assisted instruction is a new educational method

which appears to have the potential of exerting a major influence on future methods of education, and that it has popular appeal but by its very nature suffers from misconceptions and misunderstandings on the part of the initiated, the committee was instructed to concern itself with all areas of interest in CAI and in particular to concentrate on the following:

1. The collection, evaluation, and dissemination of CAI information,
2. Exchange of ideas about CAI as it pertains to members of the Consortium,
3. Assistance to members of the Consortium in the utilization of existing CAI facilities to their maximum extent,
4. The preparation of proposals for grants to support innovations in CAI.

First meeting of the committee was sponsored by the School of Systems and Logistics of the Air Force Institute of Technology where a number of demonstrations of the use of CAI by that school in the classroom was presented. In particular the areas covered management gaming, engineering, and thesis support. Members of the committee toured the computer facilities of the School of Systems and Logistics, including demonstrations of batch processing and time-sharing facilities.

The committee has met regularly since that initial meeting and has undertaken a number of important studies. Individual members have been assigned to special tasks of research in the existing literature, and a number of knowledgeable speakers and research officers have been brought to meetings of the committee from other institutions, with financing through the DMVC office. The committee early undertook a survey of CAI resources within the Consortium institutions and encouraged the formation on each campus of local CAI committees. This procedure has been followed and a number of institutions have already begun experimentation with CAI, as at Wittenberg.

Air Force Institute of Technology made available to the committee the Institute's ENTELEK file for reference purposes.

At a meeting of the committee on August 6, 1969, Dr. Hal Wilson, Director of Instructional Techniques and Systems of Harcourt-Brace and World, Inc., led a discussion and demonstration of "Teaching Remedial Reading Through CAI".

The DMVC office financed participation by the CAI Committee Chairman in the annual meeting of the Association for Educational Data Systems (AEDS) in May 1969. He provided a full report of this meeting for distribution to all members of the committee.

The DMVC office sponsored the participation by another member of the CAI committee in the ENTELEK CAI/CMI Information Exchange Midwest Regional Conference in Chicago, in October 1969.

Professor Marcus, the DMVC representative, submitted a detailed report of this meeting for distribution to all members of the committee.

The committee has collected a considerable bibliography of available materials on CAI, and has been in contact with various institutions which offer programs including one in Cincinnati.

Currently the committee is developing a proposal to seek outside funding for the introduction of a pilot program of CAI in Consortium institutions.

C. METHODS

Methods used to conduct development activities included large amounts of staff time provided by the DMVC Project Director; secretarial assistance, technical assistance, communications, etc., through the DMVC office, and in many cases by the Project Director working through the Consortium R & D Officers, or through planning committees, study committees, task forces and the like, comprised of appropriate Consortium faculty and administrative members, and in many cases students. Large amounts of faculty time were provided by the institutions involved in all of these activities, as part of the institutional contribution to the CORD grant.

Many of the larger committees delegated specific tasks to subcommittees, and in many instances requested the DMVC office to assemble various data from within the Consortium or from outside sources. It was discovered that a very useful technique to bring a committee or task force together to begin any particular activity or study was a luncheon meeting. It was found, for example, that due to teaching and other schedules it was often difficult to find a time when a committee, representative of twelve institutions could meet, except for lunch. Such meetings, the costs of which were defrayed by the DMVC office, also served as an excellent means to bring people together, who had perhaps not previously met, in a relaxed social atmosphere prior to the undertaking of business, and it was soon apparent that this was an excellent and useful device to get the committee's work off to a good start.

The Board of Trustees of the Consortium and its Executive Committee were always involved in major policy decisions, with full descriptive materials and other supportive evidence being provided to them in advance by the DMVC Project Director. The support thus provided to the DMVC office by the Trustees was invaluable, and of great material assistance in bringing about full cooperation on the part of all institutions. Where appropriate the faculty advisory committee and the student advisory committee were consulted for recommendations. All of these devices helped to insure full participation by all affected members of the institutional communities, and only such "grass roots" support made possible the successful culmination of many of the Consortium's activities.

Methods used in five of the major projects of the Consortium are reported now in some detail:

1. Bureau of Government Research

The initial stage of the study required collection of basic data concerning the governmental units and quasi-public agencies in a nine county region. The types of units considered in the inventory were counties, cities, villages, townships, school districts, special districts, and various multi-county agencies. The information gathered included population statistics, budgets of the units, employment statistics, forms of government, and average daily attendance of the school districts.

Using this data, a sample of the units was chosen for a survey and a questionnaire developed in two sections (see

appendix for questionnaires used, and other details). The first section consisted of a list of twenty-eight services, either of a continuing or short-term nature. Each respondent could choose any of four responses: the service was not needed for the future; possibly needed for the future; adequately provided currently; or in need of improvement. The second part asked the units to list the projects that they had contracted for in the past three years.

To gain an accurate estimate of the degree of Consortium involvement in a research bureau, sample departments from ten of the Consortium institutions were surveyed. The objective was to examine the resources as well as the interest of the full-time faculty, the number of full-time majors -- both graduate and undergraduate, and the character of co-operative or internship programs, if any.

The third stage of the study considered the possibility of receiving federal funds or foundation grants for the initial operation of the bureau. This involved research into the availability of grants under the federal educational acts and programs established to cope with urban problems.

2. Faculty Data Bank

The original questionnaire used to collect information for the Faculty Data Bank was developed by the Project Director from a variety of sources, but primarily using a publication of the National Science Foundation, "Systems for Measuring and Reporting the Resources and Activities of Colleges and Universities". The questionnaire went out with a covering letter from the Project Director in April of 1969, requesting return by May 1, 1969, in a self-addressed, stamped envelope.

When the follow-up mailings were ready to be made later in the year, we had by that time fairly well developed our coding system, and the new questionnaires (in two parts) reflect the coding system (see appendix). Splitting the questionnaire into two parts was designed as a means to simplify the reporting task for the individual faculty member. He received only the form marked "Dayton-Miami Valley Consortium Faculty Data Bank Faculty Form". The other questionnaire, "Faculty Data Bank Vita Information", went to the Academic Dean or equivalent for completion from the institution's individual personnel files. In most cases this information was provided to the DMVC office directly by the Dean's office and in others the form was sent by the Dean to the individual faculty member for completion.

In developing the coding system, as already noted above, it was necessary to make major decisions as to the items of information to be coded for card punching. A copy of the outline of suggested items prepared by the graduate assistant is included in the appendix. From this list was developed the coding system using a maximum of four digits for the

various items of information. The REGIS FORM (OE-2300-2.1, 3/69) was followed for listing of major field of study.

From the code book an appropriate coding sheet was developed (see appendix), and during the late summer and fall of 1969 another student assistant in the DMVC office completed the coding of all faculty questionnaires. These in turn were then referred to the Office of Computer Services of the University of Dayton for punching of IBM cards and completed in early January 1970. The punched card decks are retained in the DMVC office which has access to the IBM Sorter of the University of Dayton whenever a run needs to be made.

3. Retraining of Teachers and Administrators

The goals of the project are: (a) the identification of important issues in the retraining of teachers, administrators, and higher education personnel for teaching the disadvantaged. Emphasis will focus upon attitude change in the person and in the system toward the disadvantaged; (b) the identification of procedures by which implementation is based on positions taken; (c) a clarification of implications pertaining to teacher, administrator, and higher education personnel retraining programs; (d) the incorporation of the findings of the project into a model program of retraining educators. Project Objectives: The premise of this proposal supports the view that disadvantaged students will find school experiences successful and satisfying if they are provided with appropriate stimuli and if educational personnel are confident of the academic potential of the disadvantaged student. Thus, the major objective of this proposal is to retrain administrators, trainers, and teachers so that they will be committed to functioning in a new school reality. The emphasis will be placed on the reeducation of administrators, supervisors, and professionals in the field, university personnel, and community persons. The eventual goal is to develop educational personnel who are positively oriented toward the disadvantaged; who are convinced that the disadvantaged can learn; and whose expectations include successful learning performance by the disadvantaged child.

The following objectives are subsumed under the major objective: Objective Number 1: to help teachers develop: an awareness of the characteristics and needs of the disadvantaged student; a commitment to the disadvantaged student; and a positive feeling about the learning ability of the disadvantaged child. Objective Number 2: to help administrators, teacher supervisors, and teacher trainers develop a sensitivity to the needs of the disadvantaged pupils; to break down communication barriers; and to help in the development of a positive feeling about the learning ability of the disadvantaged child. Objective Number 3: to develop adequate self-concepts in educators. Consideration will be given primarily to the setting up of a climate which encourages change; the provision of feedback for behavior evaluation;

and the provision for a clarification of attitudes and feelings. Objective Number 4: to involve school board members in group dynamics sessions so that the school board members will develop an awareness of the needs of the disadvantaged student; an acceptance of the disadvantaged child as a worthy individual capable of desirable change; a greater awareness of the needs of administrators and teachers; an appreciation of the importance of teacher selection and training for the dynamics of educational change; a more effective communication with parents; and a greater awareness, and acceptance, of self. Objective Number 5: to help parents of disadvantaged children develop: an awareness of the need for strengthening positive attitudes toward school; an awareness of the motives of educational personnel; a greater understanding of self; and a greater understanding of other parents. Objective Number 6: to involve the university community directly in the activities of the larger community. An assumption of this proposal is that the educational institution includes not only the public schools in the ghetto areas and the urban systems of which they are part, but also the schools which train the teachers. Close cooperation between the universities and the school districts, especially in urban areas, is imperative. Objective Number 8: to improve the quality of instruction in disadvantaged schools. The intent of this objective can be realized through the introduction to educators of new curricular approaches, materials, and devices that will be useful in teaching the disadvantaged; the understanding by educational personnel that the creation of an effective learning environment which heightens the probability of success reduces threat; the development of concern for relevant teaching-learning experiences which are appropriate and meaningful to the disadvantaged student.

Parity Principle. The planning phase and pilot proposal of the project have been planned and developed jointly by the Dayton-Miami Valley Consortium faculty, by Dayton school administrators and teachers, by Model Cities' representatives, and by community participants. The Dayton-Miami Valley Consortium is a cooperative venture among 12 colleges and universities located in a five-county area surrounding Dayton. Several meetings have been held with Model Cities' representatives, administrators, teachers and teacher aides. The suggestions made at these meetings have been incorporated into the proposal. Rabbi Joseph A. Weizenbaum, President, Citizens Advisory Committee, Dayton Board of Education, has provided written support of the proposal. A specially designed project, GRIP (Grass-Roots In-Put), undertaken to secure reaction and support by the community, was conducted in early June 1969. Comments made by this group served as guidelines in the writing of the proposal.

In order to gain a wider and more certain expression of the interests of the urban community, a project Advisory Board is in the formative state. The Board, composed of 15 community

representatives, 8 public school personnel, and 7 Consortium members, will implement community participation in project design, operation, and evaluation. The Ohio State Department of Education will contribute also in the project development and implementation. A statement of cooperative endorsement will accompany the proposal.

Cooperation among institutions and agencies and with other Federal programs. This proposal represents the cooperative efforts of the Dayton-Miami Valley Consortium. The Consortium has a number of highly unusual characteristics -- the geographic proximity of the members minimizes the problems of communication and interchange of programs, faculty, and students; the breadth of the programs of cooperation includes every aspect of college and university operation; and the diversity of institutions involved insures the preservation of individuality, of student-centered programs, and of the opportunity to undertake bold, innovative approaches to the problems of higher education and of society. The project will be related to the Model Cities Program (Educational Component) through Model Cities school membership on the proposed Advisory Council.

Institutional Change. While the goals expected to be achieved by the proposal have yet to be tested realistically, the Consortium members have indicated a readiness to integrate the project into their regular programs. Major changes anticipated in college university curricula are: A. a reduction of the effort usually devoted to the study of specific methods and materials of instruction with an increase of understandings, value considerations, and thought processes; B. problem-focused seminars that will provide theoretical understanding and practical skills relating to instruction; C. an organization of classroom instruction and related field work as one unit; D. a physical relocation of a portion of the training from the university locale to the disadvantaged schools; and E. the introduction to teachers, trainers, and administrators of new curricular approaches, materials, and devices that will be useful in teaching the disadvantaged.

Major changes anticipated in the schools are: A. the understanding by teachers, trainers, and administrators that the creation of an effective learning environment heightens the probability of success; B. the development of teacher, trainer, and administrator concern for relevant teaching-learning experiences which are appropriate and meaningful to the disadvantaged student; and C. the replacement of curricular experiences determined to be unrelated to the present and future needs of the disadvantaged student by those which are relevant.

Formal Program. The pilot year of retraining will start in June 1970, and conclude in June 1971. The general format will be a year-long activity collaboration among 40 paid participants (trainers, teachers, and administrators), parents,

school board members, community members, students, project staff members, Advisory Board Members, Consortium faculty, and outside resource-leaders. The purpose will be to study needs and problems which constitute the burden of change, to confront the difficult dimensions of both individual and system change, and to devise and engage in individual and group projects to test activities which are consonant with and require new attitudes and expectations.

The summer institute phase will be preceded by a workshop bringing together selected participants, project leaders, Advisory Board Members, and Consortium faculty to preview the year's program, evaluate the proposed content of problems and issues, solicit recommendations for additions and changes in the institute. The workshop is the opportunity for participants to realize that the retraining is their problem, and they are the focal point to bring about more effective education by developing change-effect goals. The summer institute, lasting 4 weeks, will be organized as follows: A. morning presentation of appropriate subjects, problems, and issues related to the central question of professional attitudes, expectations, and behaviors in the education of the inner-city child. Lectures and seminars led by Consortium faculty, consultants, and change-action teams will be combined with demonstrations and discussions. Probable topics to be included are: child development and personality configurations; implications for learning; sociology of the inner city; cultural disadvantage and deprivation; social change; educational objectives; community and school relationships; prejudice; staff communication and cooperation; and the threat of change. B. Afternoon group dynamics sessions will build into human relations laboratories. Four to six groups will be organized for interaction stimulated by the growing clarification of the problems inherent in contributing productively toward self-actualization, issue orientation, and in making possible radical changes in the educator's self. The group dynamics sessions will provide intensive practice toward project goals.

The in-service year continuation will begin in September and continue throughout the year until June 1971, and will include weekly group dynamics sessions, held in the schools and in colleges. Learning in effective communication and in adaptation to attitude changing practices will continue as discussion will focus on progress reports, current problems, and developing prospects for significant change. The pilot year activities will conclude in June 1971, with an evaluation by all personnel involved. Judgments expressed about the format, content, and alternative procedures will help determine modifications to be introduced into the second year.

4. Manpower Proposal

- 1) The consortium manpower resource center, to be functional along the lines of development which are clear by the end of the first year of support, would consist of the Director,

secretarial, and clerical staff, some student and community member assistants and an executive program operation committee. The executive committee would function with the director and staff to reach operational and budget allocation decisions, appraise, refine and extend programs and assist in all phases of program promulgation, especially within the consortium precincts of faculty, students and college administration. Committee members would be rotational each year to insure both continuity and spread of involvement. Committee representation would be as follows:

- . Two consortium faculty with research as primary interest
 - . Two consortium faculty with curriculum development as primary interest
 - . Two manpower agency leaders
 - . Two community members from target populations
- 2) The executive committee would either come from or be selected by the manpower resource center advisory board. The consortium project would be managed and administered in response to the policy, goal and directional judgments of the advisory board. The constitution and functioning of the advisory board would be in effect by the end of the first year of support.

Composition of the board would approximate the following representation:

. Consortium faculty -	5 members
. Consortium students -	3 members
. Employer groups -	3 members
. Labor groups -	3 members
. Public schools -	3 members
. Manpower agencies	4 members
. Community spokesmen	4 members
. Government manpower specialists -	4 members
. Director of Consortium Project -	<u>1</u> member

Total 30 members

The exact membership and number of representatives would be decided by the first year planning and specification seminar.

- 3) The consortium manpower resource center would have the following operational objectives and responsibilities:
- a. Funds allocation to sub-projects and related administration.
 - b. Continuous fund raising from Federal and private sources.
 - c. Buildup and maintenance of information on consortium resources in manpower - faculty, students, reports, materials, library bibliographies.

- d. Discussions with and presentations to consortium faculties to explain the manpower concentration, secure faculty identification with the center and stimulate institutional and interinstitutional activity in research, teaching and community manpower problem solving.
 - (1) Planning for this objective includes the evolution of workshops, seminars and group sensitivity sessions around such subject matter as economic and social conditions, their causes and realities, which will enable community front line participants in poverty and the struggle for upgrading to act as educators of the faculty.
- e. Assistance to outside manpower agencies and manpower programs in the study and specification of the most productive design of an area coordinating body which will reduce confusion and overlap, bring coherence to problem definitions, analysis, data collections and program action and improve significantly the delivery of needed service. The consortium manpower resource center board would automatically further this objective and would have a vital interest in the reciprocal relationship between the consortium manpower center and the community wide coordinating body.
- f. Curriculum improvement, creation of institutional and interinstitutional manpower specialization options within departmental or interdisciplinary majors, creation or selection of interdisciplinary courses which contribute to manpower specialization or background in undergraduate and graduate levels. Depth study of the work and field experience opportunities which can be combined with academic curricula to provide a richer education, and badly needed manpower for employers.

The idea of faculty-student teams for periodic off-campus contractual service, research, program evaluation, problem surveys, etc. to an employer, agency or governmental body would be explored.

- g. Assistance to faculty, agency leaders and community representatives to clarify needs for research and problem studies and to provide as much support as possible to faculty research (including faculty-student teams). The following are needs and opportunities in research and special projects which are obvious at the present time.
 - (1) The impact of Cooperative Education on academic performance, career directions and employability of black students - college and high school levels.

- (2) Evaluation of local Talent Search project and high school - community college cooperation to improve career guidance counselling. Both programs, which are being readied for funding and application, propose to interconnect the public schools, the consortium college and universities, employers and manpower agencies to locate and influence underachieving, drop-outs, dropout-tending and low-income students to continue or resume their education, career choices and preparations beyond the high school diploma.
- (3) Complete inventory and operation study of the consortium area manpower service programs, including recruitment, qualifications and referral services, institutional training, on the job training, employer and government employment services, vocational and career guidance and for the study of the practicality and form of a community coordinating body.
- (4) Cooperative project with the Dayton Model Cities one-stop job center to help solve delivery problems, reduce overlap with other programs and evaluate effectiveness.
- (5) Study among area employees of present and future manpower needs, requirements for skills and backgrounds compared to the availability within education and training programs of curricula and skill preparation to meet and stay abreast of changing occupational demands.
- (5a) Research on the degree of upward mobility accessible to trainees placed on entry level, low paying jobs. Research to collect and disseminate data related to cost-of-living index which would reveal effective earning levels of training.
- (6) A task analysis of social welfare jobs.
- (7) A study of area migrant manpower conditions, including a study of literature and reports available from state and private assistance and regulatory agencies to determine the kinds and degrees of deprivation and to recommend steps to remedy avoidable hardships and inequities.
- (8) Manpower problems of the Appalachian sub-population in Dayton.
- (9) Research activities leading to utilization of disabled persons as a manpower resource.
- (10) Research in connection with the Monsanto Research Corporation and Miamisburg plan to hire, train and upgrade unskilled employees, and to open

residential opportunities in the community for employees.

- (11) The design of a three part project to encourage the expansion and stability of small business enterprise in the black community:
 - (a) Junior Achievement program for high school students
 - (b) Small business management training program for potential owners of small enterprise
 - (c) Management development seminars and consultant service to existing business owners
- (12) Adult education prospects for immediate future:
 - (a) Continuing education in Personnel and Manpower Requirements and uses for state, county, municipal and educational officials who have personnel and manpower responsibilities for their governmental or educational units.
 - (b) Seminars for combinations of consortium faculty, employer and labor leaders and representatives from low income communities to consider all aspects of equalization of employment opportunities, different perspectives on background deficiencies, hiring, training and upgrading practices and institutions versus individual needs and goals.
 - (c) Seminars and workshops for employer foreman and first line supervisors along with community people to consider attitudinal and behavioral barriers to successful intake and progress of low-income, inexperienced and unskilled persons.
 - (d) Seminars for employers to consider expansion of job opportunities for female heads of households and unemployed youth. Such seminars as (b) (c) and (d) can open up the question of employer social responsibility for maximum easing of entry, training, supplemental education and for provision of a satisfactory environment of support and encouragement.
- 4) The first year would be devoted to a study in detail of the implications of the above stated proposed plan and to an implementation of the beginning organizational structure. The program design would be tested and refined in discussions with all consortium and outside constituencies. The director would lead the collaboration with the board of advisors, the initial persons to be invited to participate by the consortium president on behalf of the consortium board of directors (presidents of member colleges).

Decisions would have to be made on project, research and curriculum development priorities to allocate funds for some projects which can be started in the first year.

A small amount of consultant time would be drawn upon to assist in program design appraisal and refinement.

The first year development format would be a bi-weekly seminar (at least 20 sessions). The seminar would be open the first year on a continuing basis to graduate students for whom the manpower resource center project will be of research interest. Such students would be able to benefit and contribute by means of surveys, data collections and analyses which will advance the seminar purposes.

Sub-groups within the seminar would be delegated to study questions and present recommendations in order to firm up:

- a. Research, evaluation and other area problem related needs which will guide the recruitment and stimulation of consortium faculty.
- b. Methods to achieve satisfactory inventories of faculty research interests and competencies, in-field professionals with research or teaching interests, and to accumulate and distribute vital data, current reports and bibliographies relevant to manpower problems.
- c. Plans for curriculum improvement including recommendations for additional faculty, courses which should be added and field experiences which should be incorporated.
- d. Priorities in adult and community education.

PROPOSED RESEARCH PROJECTS AND DESIGNS

MANPOWER RESEARCH PROJECT

The Impact of Cooperative Education on Low Income Students -- Aspirations and Self-Concepts; Academic Performance; Career Directions and Employability

Cooperative Education provides for the alternation of students between separate periods of study and off-campus employment in jobs related to developing (and changing) career and professional interests. Such programs, especially at the college level, have the following key elements.

1. A substantial number of work periods, usually in a regular alternating sequence, added to the academic study program.
2. Special counsellor and faculty guidance and advising (pre- and post-job to help students choose appropriate jobs and to integrate learning from job experience application and training with classroom studies.
3. Careful job placement to assure real responsibilities, increasing complexity of tasks and challenge, professional environments, supervision and skill training and employers who are attuned to the educational benefits which they can extend.
4. Emphasis upon extra-job opportunities within the communities for student learning and self-development. Field seminars, studies at other universities, community service projects, and cultural events -- these and other exercises, including the student's management of his own residence, living expenses and recreation time are stressed.

Within the Dayton-Miami Valley Consortium, there are three colleges which enroll significant numbers of low-income students for whom the Cooperative Education venture is still a new form of education. Antioch College, which has practiced Cooperative Education for more than 45 years, started in 1964-65 to recruit and admit students from several inner city populations, most of whom are black and all of whom have severe financial need. Ninety-two students have been admitted through the fall quarter of 1969. Wilberforce University, a predominately black institution, made the changeover to Cooperative Education in 1964-65 and its program has grown from 19 student placements in 1965 to 187 student placements for the fall trimester of 1969. Three hundred thirty-seven students held program jobs in the spring-summer trimester of 1968-69. Sinclair Community College in Dayton has practiced Cooperative Education for a long period but has just

recently, within the last two years, started to enroll larger numbers of students from the west side ghetto to put forth special efforts in the preparation of such students for jobs, and to modify curriculum and counseling for better career guidance and preparation. In addition to the colleges, Roosevelt High School, the largest of three predominately black ghetto schools in the Dayton school system, added Cooperative Education in 1969-70 as part of its experimental attack upon the dropout problem. Wilberforce University will be the largest ground of experience for research but the other two colleges and the high school will provide valuable data findings for comparison purposes.

Hearty claims are made for the educational and developmental value of Cooperative Education by those educators who practice the form and are committed to it. All such glowing claims derive from a generalized experience of the apparent success and satisfaction of students, based upon student testimonies and what is generally construed by faculty and counsellors to be such gains as increased responsibility for goals formation and achievement, greater academic study motivation, improvement of communication skills, and a more sophisticated appreciation of real world problems, professional work opportunities, as well as the demands of the professional world for preparation. But such claims have pertained largely to students from the white middle class and, to a significant extent, to those students in engineering and business administration. More importantly, no precisely controlled or in-depth study of a particular program or cluster of programs has been done to evaluate the variety and scale of educational advantage or to isolate any real disadvantages to learning progress. Objections to Cooperation Education have been expressed with the same impressionistic confidence as have the valued advantages.

The Dayton-Miami Valley Consortium setting is a unique opportunity to study Cooperative Education's impact on black students who have received little or no cultural preconditioning of expectations or readiness for work as education, and to compare findings about them with evidence of achievement among their peers who pursue a straight academic course. The student experiences to be studied and analyzed will cover the range of curricular interests from the humanities to physical sciences and engineering with a large number from studies in social and behavioral sciences. Certain aspects of the study, if not all of it, will be applicable to high school as well as to college students.

The research design will be refined into hypotheses, questions, and reliable forms of data gathering and control to investigate the effect of Cooperative Education on:

1. Student self-image, and aspirations, self-respect and confidence.
2. Changes in and development of satisfying career interests and directions.
3. Academic performance -- motivation to study, range of subject interests, selection of major, ability to do independent work.
4. Learning attributable to job holding-skills, attitudes, conceptualization processes and the address of problems.
5. Values and long range objectives -- community concepts, social problem perceptions, terms and contexts for self-realization, priorities for post-graduate action and growth.
6. Limits imposed by students' backgrounds -- ability-- attitude -- value configurations, cultural sets and other conditioned factors which militate against success in Cooperative Education.
7. Perceptions by students of purposes and meaning of Cooperative Education contrasted with program objectives as a factor in student accomplishments and success.

SUGGESTED MANPOWER RESEARCH AREA

by

Hollis Price - Assistant Professor of Economics, Antioch College

There is a myriad of mutually reinforcing factors responsible for the economic underdevelopment of the Black community, e. g. discrimination, inadequate health services, overcrowded educational facilities, etc. and although a final resolution of this economic problem will require effective action in each area, some factors can be identified as strategic because of their potential "spin off" effect. Employment is such a variable. For if the employment situation of the Black worker can be substantially improved, the impetus will be generated for wide spread improvements in the economic status of the Black community.

One crucial aspect of this complex employment problem is the occupational lag. Black workers are disproportionately concentrated in jobs characterized by low pay and intermittent employment and which are most subject to technological obsolescence. Thus, if manpower programs are to be maximally effective, they must provide training which rectifies the above mentioned unbalance. "...nonwhites ... will have to gain access to the rapidly growing higher skilled and white collar occupations at a faster rate than they have in recent years if their unemployment rate is to be brought down toward the same level as that of their white fellow citizens."

Labor market research could render a valuable service by developing projections of future labor market demands in the Dayton area, thereby providing the necessary information upon which viable manpower programs could be structured.

A second aspect of this problem arises from the fact that in recent years most of the economic growth within the metropolitan area has occurred in the ring or suburban communities while the Black population remains concentrated in the center city. In many cases jobs are available but inaccessible to the Black worker. Research on the past and projections of future job locational patterns within the Dayton metropolitan area could be undertaken to determine whether or not there is a need to develop dispersion, as well as training programs. If there is a need for the former, resources will have to be allocated to develop transportation projects as well as to raise the skill level of the Black labor force.

As the National Advisory Commission on Civil Disorders noted, "For residents of disadvantaged Negro neighborhoods obtaining jobs is vastly more difficult than for most workers in society. For decades, social, economic, and psychological disadvantages surrounding the urban Negro poor have impaired their work capacities and opportunities. The result is a 'cycle of failure' -- the employment disabilities of one generation breed those of the next."

AN EXPLORATION AND PILOT STUDY OF TASK ANALYSIS OF
SOCIAL WELFARE JOBS
STATEMENT OF PROBLEM

The understanding of the dynamic relationship within the triad of client needs, worker skills and the social welfare systems provides the basis for arriving at solutions for one of our major social problems, namely the manpower shortage. The primary objective of this proposal is to outline an investigatory instrument which meets this requirement.

The critical nature of the manpower shortage has led to the need to examine several questions in the delivery system of social services. Among them are:

1. What do workers do within the system?
2. Are social welfare client needs satisfied now and to what extent?
3. Are there ways to improve the manpower condition and thereby improve the service?
4. What are the systematic steps, constructs and problems implicit in the interrelationship of the above?

The proposal outlines the theoretical framework and methodology to ascertain the substance of the actual process and services, and the variables and problems in defining and ordering social welfare tasks within those systems. This pilot study is predicated on the need to identify the kinds and numbers of personnel necessary to staff present day social welfare services. Further, the goal is to study the service process in order to determine the elements of the delivery system. Thus, we will be able to provide the basis for the improved utilization of present personnel as well as new job types. The approach will be primarily functional and rooted in the concept of differential skill levels. The methods employed will also produce guidelines for education and/or training models for differential personnel.

The proposal is predicated on the following assertions:

1. Through direct or indirect interpersonal activities, the social welfare system has as its responsibility the modification of the ENVIRONMENT and its institutions to meet HUMAN NEEDS and/or

2. The responsibility of assisting HUMAN BEINGS to adapt and make better use of the ENVIRONMENT and its institutions.
3. Social work is one of several occupations within the social welfare system and is central to it.
4. We define social worker as "occupation-as-fully-trained", with the master's degree in social work from an accredited school.

The fundamental contention is that no task analysis of social welfare jobs can be formulated as a separate entity and apart from the client populations the system serves. Therefore, the attention of the pilot study will be directed to identifying those processes which characterize "what gets done" and by whom. These identifications will be studied against the limitations of the systems. In this way, the options and levels of worker tasks can be defined, refined, rearranged, distributed and clustered according to knowledge required, skills and performance levels.

THEORETICAL CONSTRUCT

Research management necessitates theoretical stabilizations. Social welfare delivery systems, recognized as such from a bird's eye view as having common goals, are highly variable in their particular objectives and responsibilities. They also differ from one another in organizational structure, personnel classifications, methods used, management and so forth. To add another set of variables, that of the client population served, enlarges the already overburdened complexities. However, because the social welfare delivery systems are rooted in practice and service, the client population and its needs are their "raison d'etre". Therefore, the client population and their needs becomes an integral part of the construct and design as presented here.

The rationale for the departure in the paradigm, as presented by Fine, is that his is structured vertically. Fine's common factors are more appropriate to compare delivery systems and their tables or organization. It does contribute a stable way to manage quantifiable data of work tasks within the world of occupations.

The proposal presented here blends some of the dimensions of Fine and Jaques and adapts them to the "work world" of social welfare systems in depth.

The theoretical construct presented acknowledges the increase and complexity of social welfare work tasks and responsibilities (quantitative) and the professional, technological and artistic substance of the work tasks (qualitative). In other words, it is the study of the substance and balance between efficiency and proficiency in which the theoretical construct presented here augments Fine and Jaques. To put it another way, the pilot study will concentrate on "what gets done" and by whom and why. Since this is intimately linked with HUMAN and ENVIRONMENTAL needs as presented by the client and/or recipient of the service system, it will also identify within the system "what workers do" and point out the consonance or dissonance.

The outer perimeters will be the systems and their objectives, policies and limitations of service. The inner boundaries will be the client and recipient populations and their multiple needs. The intermediary levels are the workers and their tasks in the dynamic interaction between the system and the client.

The theoretical construct for the purpose of the pilot study resembles a conical spider web (symmetrical or asymmetrical) with the client population at the center core and with five ribs or spokes, representing the pathways of the service system through which the client(s) travel. The circular arteries or connective links represent the various work stations between and among the service systems, but still relating to meeting the needs of the client in different work tasks. Each major work station (Intake, Treatment, and Administration) has sub-pathways depending upon the professional, technical and other worker skills available, according to the breadth and depth of the service system.

With this design, it will also be possible to measure and/or rearrange the work tasks along the system pathway, not only for efficiency, but also for proficiency in optimizing the available manpower. It has the potential of pinpointing the strengths of manpower utilization as well as developing checkpoints of worker performance and worker distribution.

The theoretical construct does not necessarily assume a more complex worker skill or capability as the client goes through the systems pathways. It assumes a different skill, needing different training or education. It postulates that the social worker is the head of a team at the major work stations. The intake social worker determines the pathway within the system which is appropriate for the client to follow. He may also redirect the client to another system more applicable to the client's needs. The next major station, also headed by a social worker, is the treatment station. This, too, is formulated as a team concept with several levels of work tasks within it. The third major station is administration, also headed by a social worker, and has several levels of work tasks within the unit.

Some service systems may not have all the work stations in similar progression. These will be noted and field tested. Some work stations and their subdivisions will cluster more easily than others and differ from system to system. Those which have common performance characteristics will be abstracted for the purpose of developing guidelines for educational, in-service or on-the-job training models. (SEE TASK-EDUCATION RATIO, page 10).

The construct presented can be linked to the breakup of work tasks at each major station as they relate to PEOPLE and DATA functions. (SEE VISUAL DESIGNS OF THEORETICAL CONSTRUCT, page E-3e, E-3f and E-3g

SCOPE

During the pilot study, five (5) major social welfare delivery systems will be chosen as the sample. These will be defined as to their:

- a. Objectives
- b. Organizational design
- c. Methods and Services available
- d. Tasks performed by professional, technical and para-technical personnel to achieve their goals.

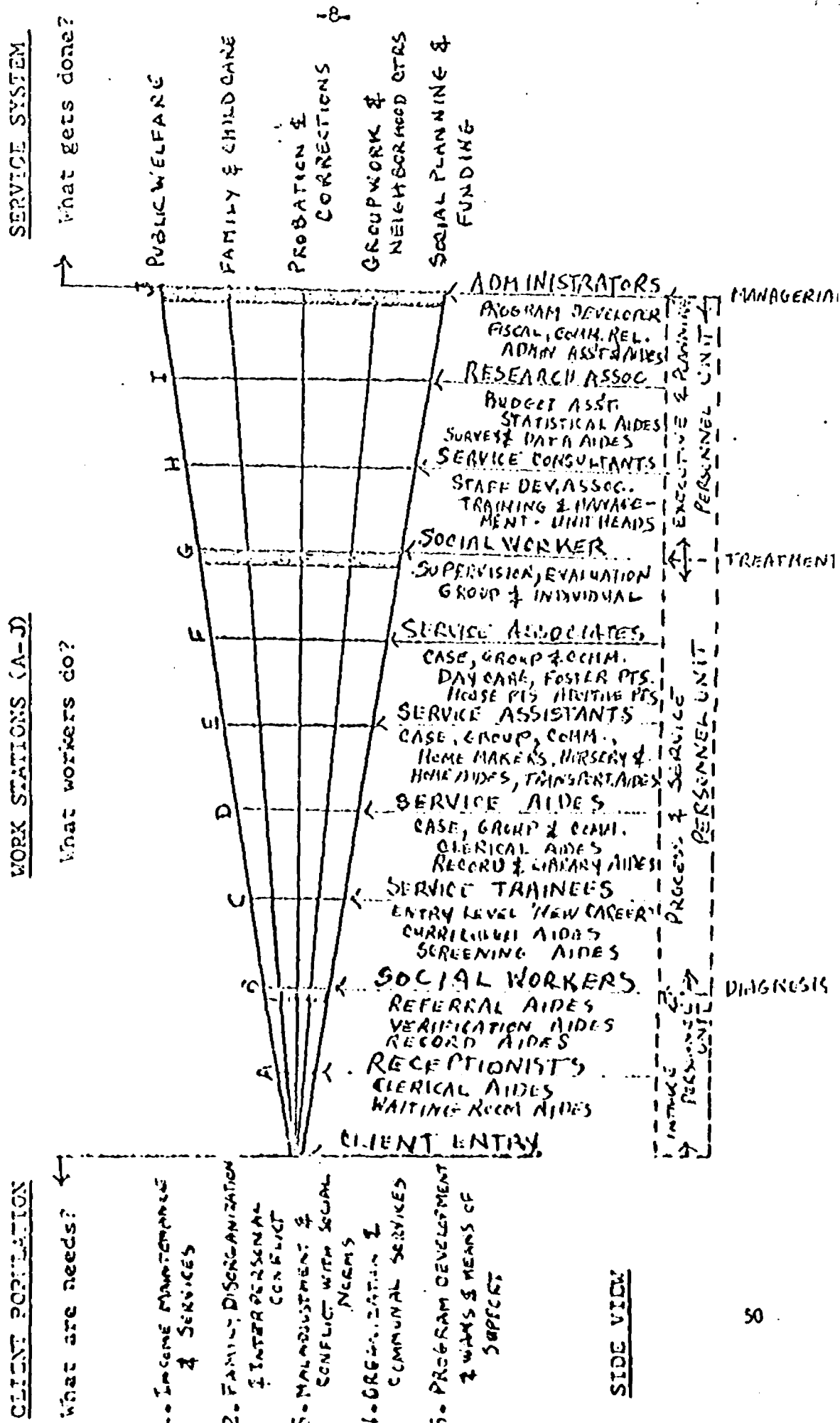
The five (5) social welfare delivery systems chosen will be:

1. Public Welfare
2. Family and Child Care
3. Probation and Corrections
4. Groupwork and Neighborhood Centers (non-recreational)
5. Social Planning and Funding

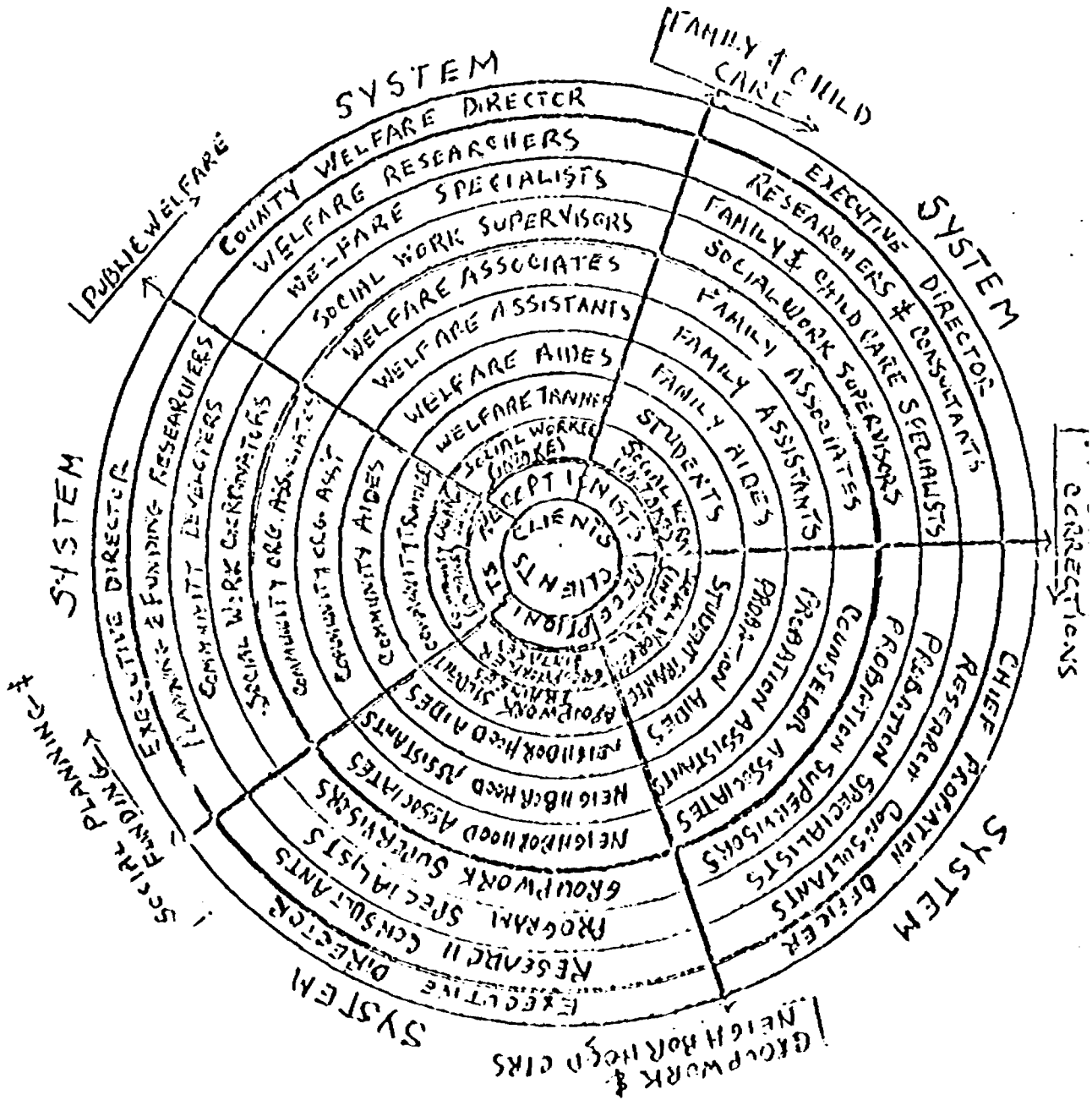
Wherever possible, the sample of delivery systems will be randomly selected from public and private auspices, but will not be studied for comparative purposes. These systems will be reviewed in large, middle sized and small communities. The social services which are an auxiliary or an integral part of other major delivery systems, i. e. hospitals, mental health, education, housing, employment and so forth, will not be part of the sample.

The first phase of the pilot study will include field visits to three (3)

THEORETICAL DIAGRAM OF CONSTRUCT

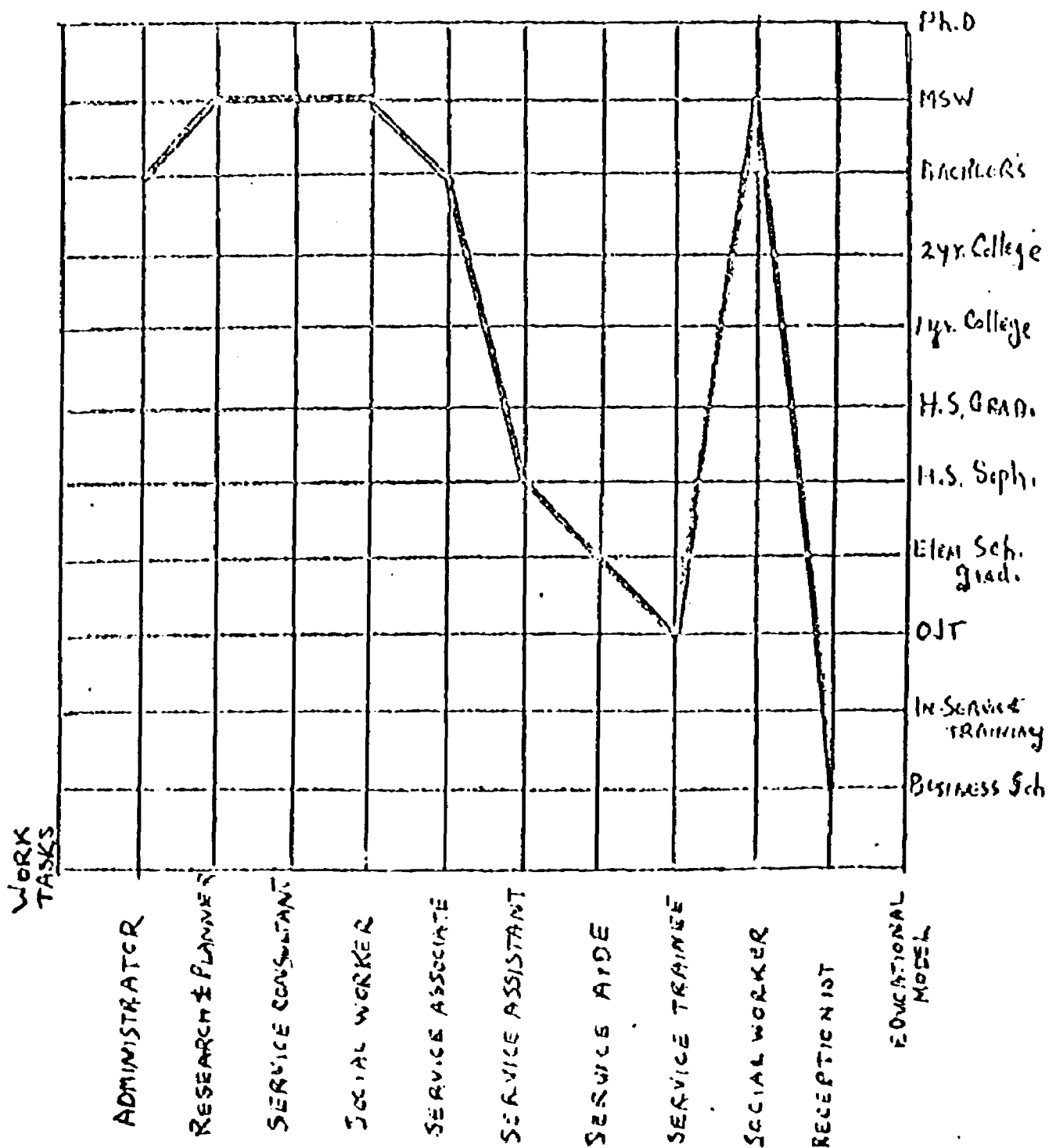


THEORETICAL DIAGRAM OF CONSTRUCT



FROM: VLM

THEORETICAL MODEL "TASK-EDUCATION RATIO"



cities of different population size. On the average, one (1) day will be spent in each setting in order to understand the system of delivery of each agency. Tape recordings will be made of intake and treatment content. In addition, the Project Director will interview the administrator. In this way a sample of about one hundred fifty (150) interviews will be available for later analysis, according to the methodology outlined in Phase I below. In Phase II, the planned questionnaire will be subject to pre-testing in three (3) other cities of similar size but different locations.

APPROACH AND METHODOLOGY

An adequate description of the person to person interactions characterizing the activity of the social worker is preliminary to identifying those skills employed in the client-worker engagement found in the social welfare system. To determine and classify such skills requires that sociological and psychological parameters of both the interview situation and the welfare structure in which the interview is undertaken, be delineated carefully.

The classical method of using questionnaires determining job and task contents may be inadequate for two reasons. First, questionnaires are constructed on the basis of some thesis developed by the author(s) which underlie the phenomena under investigation. The rationale for the construction of the questionnaire may be difficult in the absence of first obtaining a clear understanding of those factors which influence the client-worker relationship. In this sense, the questionnaire can represent an attempt to get at the facts without an adequate strategy for the elicitation of the pertinent facts. Second, questionnaires by and large constitute a static tool in the repertoire of methods and techniques available for research in the social area. Questionnaires may not be sufficient for research applications to states and conditions which are dynamic in nature and of which the present social welfare situation is of direct concern.

In lieu of the questionnaire method, the present study proposes that the pilot effort should attempt to arrive at the critical parameters of client-worker relationship through non-directed tape interviews. From the context of a client-worker relationship characteristic of the social worker function, those factors which operate to define the task skills can be subsequently elicited, categorized, defined and carefully studied. The concepts advanced by Fine (1, 2), Flanagan (5) and Jaques (6, 7) which relate to the observing-learning dimensions, the criticality of incidents and the decision-making dynamics which are likely to pervade the social welfare service function can provide the basis for the assessment of the data and for the development of testable hypothesis for later test and verification.

The plan of the research methodology is as follows: Personal data on the client are gathered and made a part of the research record. Similarly, the training, classification and experience level of the worker is recorded. For the interview situation, the research record will indicate the basis and objectives of the interview. The entire encounter is then recorded using conventional recording apparatus. The completed tape is then reviewed orally by qualified MSWs available to the project. The following data are collected:

- a. A flow of the interactions occurring between client and worker.
- b. Total time of the interview and the stresses.
- c. Decisions made during interview (referrals, further investigations, service needs (or not) recognized and/or available).
- d. Kind and amount of breakdowns in communication between client-worker.
- e. Enumeration of worker tasks related to services and programs within the system.

Post analysis of the interview tape report and derived plans would include:

- a. Extent of rapport achieved and the means of achieving this rapport would be identified and studied.
- b. Skill factors (communication, flexibility in shifting probing strategy), persuasion, negotiating.
- c. Characteristics which differentiate flows for the various client-worker cases:
 1. Among different types of worker backgrounds (training and experience).
 2. Level of interview (in-part, etc.)
 3. Objective of interview or service.
 4. Others
- d. Effectiveness of the probing strategy used.

The data obtained from the foregoing will enable us to structure a concept for questionnaire development. The important variables derived from the flow will then be tested and verified through the questionnaire. The information from the questionnaire will then constitute the basis for developing skill specifications which are required to perform an array of social welfare tasks.

TIMETABLE

The first month will be devoted to setting up the administrative plan for the pilot study. The second and third months will be devoted to field visits and interviews. A quarterly summary could be submitted at this milestone. The fourth, fifth and sixth months will be for analyses of interviews and systems data. A mid-year report will be planned. The first six months will constitute the pilot study (PHASE I).

In PHASE II, the written questionnaire construct will be designed according to analyses of PHASE I, and subjected to testing in three (3) other cities of like size but different location. The seventh and eighth months will concentrate on the refinement of the questionnaire and the directions for its use. Along the way, the problems will be noted as they arise. A third quarterly summary could be submitted. The ninth and tenth months will focus on the reduction of the material into constituent and common parts and linking it with data processing. The eleventh and twelfth months will be to collect, synthesize and summarize the data for the final report of the end product outlined earlier.

BIBLIOGRAPHY

1. Fine, Sidney A., A DESIGN FOR NEW CAREERS, Paper given at meeting of American Personnel and Guidance Association, Detroit, Michigan, 1968.
2. Fine, Sidney A., "Nature of Skill: Implications for Education and Training", PROCEEDINGS, 75th ANNUAL CONVENTION, American Psychological Association, 1967.
3. Fine, Sidney A., A FUNCTIONAL APPROACH TO A BROAD SCALE MAP OF WORK BEHAVIOR, Paper given at meeting of American Psychological Association, 1963.
4. Fine, Sidney A., "A Structure of Worker Functions", PERSONNEL AND GUIDANCE JOURNAL, 1955.
5. Flanagan, J. C., "A New Approach to Evaluating", PERSONNEL, July, 1949.
6. Jaques, Elliott, EQUITABLE PAYMENT, New York, N. Y., John Wiley and Sons, 1961.
7. Jaques, Elliott, MEASUREMENT OF RESPONSIBILITY, Cambridge, Mass., Harvard University Press, 1965.
8. Cleland, D. I. & Munsey, W. "Who Works With Whom?", HARVARD BUSINESS REVIEW, 45(5), 1968.
9. Simmons, R. E., "The Brief Interview As A Means Of Increasing Service", SOCIAL CASEWORK, 48(7), 1967.
10. U. S. Department of Health, Education, and Welfare, "Closing The Gap In Social Work Manpower", REPORT OF DEPARTMENTAL TASK FORCE ON SOCIAL WORK EDUCATION AND MANPOWER, November, 1965.

Manpower Research and Training Suggestions
by

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Wright State University

In a recent meeting with Dr. Jack Hutchison, Assistant Superintendent of Public Instruction for Vocational Rehabilitation, I mentioned the manpower application and am writing this with his permission.

During the course of the meeting Dr. Hutchison mentioned that approximately (300, 000) three hundred thousand, Ohio citizens are disabled. He further indicated that approximately (65, 000) sixty-five thousand, persons per year become disabled.

There is great need for research activities in the area of utilization of this large manpower resource. The research could be in several different areas as follows:

1. Methods needed to change employer attitudes toward the disabled.
2. Industries most likely to hire and train the disabled.
3. Possible approaches to legislation which would assure reasonable consideration of the disabled.
4. Labor management relations as a barrier or aid to employment of the disabled.

The above is by no means the complete list of researchable material in relation to utilization of the disabled but is only a small sample of areas that need exploration.

Also in need of research in the helping professions is the problem of recruitment and retention of professional workers to staff agencies. For example the following areas are amenable to research:

1. On going salary studies
2. Approaches to recruitment
3. Design of management functions which permit ongoing evaluation
4. Design of job duties which would help the professional to develop an intrinsic reward system

Dr. Hutchison has stated that if reasonable research programs are developed the Ohio Bureau of Vocational Rehabilitation would be amenable to a cooperative effort.

Proposed Research Program

One facet of our proposed research program will be with the Monsanto Research Corporation Mound Laboratory of the Atomic Energy Commission in Miamisburg, Ohio. Preliminary meetings have been held with their Directors of Administration, Training, Employment and Equal Opportunities and with the City Manager's staff of the city of Miamisburg. Representing the Consortium have been professors of education (Wright State), economics (Wittenberg), psychology (Sinclair), political science (Central State), business (Wright State) and sociology and social work (Antioch).

Several subject areas of concern have been identified:

a) Previously, Monsanto required a high school diploma for employment. Today, due to pressures from the National Alliance of Businessmen, non-high school graduates have been hired. This year, 28 hard-core small parts workers are on the job. Fourteen of those are black and fourteen are from Appalachia. The average education of the whites is tenth grade. The average education of the blacks is fifth grade. To the amazement of Monsanto, these employees are proving to be as capable and as reliable and as efficient as those who were hired under the old rule, which required a high school diploma.

Individual project contemplated:

Have we placed too much stress on credentials? Is diplomasm serving as a cruel device to screen out potentially able employees? What other departments and jobs at Monsanto (1800 employees) in particular and in industry in general can relax educational requirements in order to make more applicants available to meet America's manpower needs in the 1970's?

b) Now that entry jobs have been established for the hard-core, how can they be promoted in accordance with their abilities in order to enable them to enter the main stream of industrial, economic and commercial life?

Monsanto has two pay plans, one for salaries, and one for wages. The former is on an annual base; the latter is on an hourly base. They are as follows:

<u>SALARY SCALE</u>		<u>WAGE SCALE</u>	
Highest		Highest	
A	Technicians	12	Maintenance Trades
B	Secretaries	11	(skilled)
C	Clerical, Skilled	10	
D		9	
E		8	Drivers
F		7	
G	Supervisors-Production	6	Service Workers
H	Inspectors	5	Minor Clerical
Lowest		4	
		3	Small Parts Workers
		2	Laborers
		1	Custodial
		Lowest	

Individual project contemplated:

We propose to put at the disposal of Monsanto (Dr. Rita Tilton, Assistant Professor of Education and Business at Wright State University would direct this project) the resources of the Consortium to set up in-service promotional training programs so that hard-core people can compete for promotion. Courses would be held in the ghetto area (Miamisburg is 13 miles from the ghetto) or at the plant. Complete job analyses would be made of all jobs and training programs would be set up. Comprehensive inventories of all assets of hard-core employees would be made in order to individualize educational plans for promotion. Both objective tests and subjective evaluations would be utilized in the process

of individual analysts. The community and graduate students would be involved by making available successful people who are from the applicant's and who can serve as models for emulation movement of employees from the wage scale to the salary scale will be sought. Attempts would be made to increase job opportunities for women. (A number of women would like to drive vehicles, for example.) Cooperation would have to be secured from the labor unions, for most employees under the wage compensation system allow the trade unions to bargain for them.

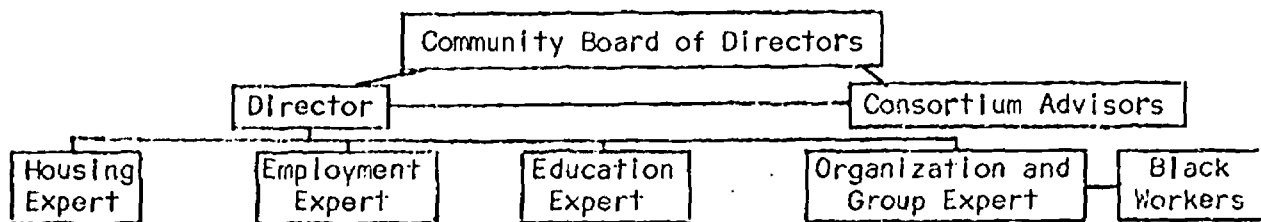
Several problems would have to be dealt with: Should the in-service training for promotion be on company time, employee's time or a combination thereof? Should all employees be eligible to attend or should it be restricted to minority groups?

c) The question of a security clearance to handle government secrets is an area we wish to deal with. Such clearances may take 12 weeks. They cover every aspect of a citizen's life from the time he was five years of age until today. The Atomic Energy Commission does not wish the requirements which one must meet to be cleared for secret work to be relaxed. On the other hand, other Federal agencies, such as the United States Commission on Civil Rights do wish the rules for clearance for work with government secrets to be relaxed. Caught between these two opposing and conflicting agencies and points of view is the employee. In the past, any arrest record was fatal and served to effectively screen out the hard-core black population. Today this rule is somewhat relaxed.

We hope to study the validity of the arrest rule. Are those who have been arrested less loyal to the United States? Are they security risks? What should be our criteria in this regard? What happens to those who can not get a security clearance? Should they have a hearing if they desire it? How can a potential employee live during the 12 week period which is involved in consummating his

security clearance? Do those who are conducting the security searches have sufficient orientation to ghetto life, problems and modes of living to be able to give proper weight to sociological factors which should be considered in making decisions regarding life patterns in a ghetto area? How can we get various Federal agencies together so that they can see eye to eye on this question?

d) In short, we see Monsanto (and they agree) as a focal point for the application of manpower know-how from the colleges and universities of the Consortium. This leads us to our final point. Miamisburg is 100% white. We hope to establish a program to integrate the community, so that black workers, if they desire, can live there as well as work there. In order to accomplish this, much seed work must be done with the power structures in the areas of education, housing, real estate, religion and government. The fact is that many corporations are moving from the cities to the suburbs. Unless minority groups can live where they work, transportation problems alone will decrease their opportunities to secure and to maintain employment. We hope to crack the whiteness of Miamisburg. If we can do this, we would be setting up a model for the country. At present, there is a group of power structure people meeting regularly to determine how to do this, but they need professional guidance, counseling and direction. We see a community relations task force to accomplish this mission, to be organized as follows:



This is our most ambitious program. We are assured of Monsanto support, both moral and financial, to supplement U.S. Labor Department funds.

5. COSIP Proposal

To operate this project, it was planned that the two instruments would be located at Wittenberg University and Central State University, in order to provide the maximum exposure to the largest number of students and to supply the instruments with adequate laboratory facilities. Maintenance would be achieved through service contract with the manufacturer and by the technical staffs of the cooperating departments. In order to gain most effective use of the instruments, one faculty member at the instrument's location would be assigned the responsibility of becoming fully acquainted with the instrument and to prepare experiments and study materials for use in the workshops held for students and faculty of the cooperating institutions.

Workshops once or twice a year would be held for faculty and students of the cooperating institutions devoted to instruction in the spectroscopic instruments and in computer techniques.

It was contemplated that the RCA Spectra 70/46 computer of the University of Dayton would be made available through terminals located at the five institutions. At least once a year a workshop held on one or more campuses would serve to introduce students to the techniques of computer work and to demonstrate the use of the equipment. Workshops would be so structured that students would not only receive instructions on the use of various kinds of equipment but also an exploration of the types of problems that could be solved. The workshop would be a meaningful introduction to computer technology. Instruction and program of this workshop would be furnished by the Consortium and by the Office of Computer Activities of the University of Dayton. All of the cooperating institutions would offer mathematics courses and computer programming courses necessary for an understanding of computer technology.

II FINDINGS AND ANALYSIS

1a. Computer Services and Activities

Computer workshops early demonstrated the widespread interest of faculty and students in becoming familiar with the various uses of computers, and stimulated many institutions to initiate courses in computer programming and other aspects of computer work. The experience with the installation of remote terminals on a number of campuses showed that it is possible to bring sophisticated computer services to small institutions at very low expense, and thus to avoid necessity of installation of expensive hardware on such campuses. Batch processing using the large computer of the University of Dayton has proven attractive to many Consortium institutions, and is provided at relatively low cost. The fact that most of the institutions which originally took advantage of the "package deal" offered by the DMVC office have elected to continue use of the terminals for instruction, administrative services, and research demonstrates the value of the "seed" money thus spent by the Consortium.

1b. Cross-Registration, Course Consolidation, and Faculty Exchange

Although cross-registration attracted a large number of students and provided opportunities for students in the smaller institutions to enrich their curricula, nevertheless the mechanical problems of differing starting and ending dates of school terms by Consortium institutions were very large, as well as the physical problems of transportation. Cross-registration will not become a major factor in student exchange until these mechanical problems are overcome, and there is considerable interest on the part of many of our institutions in working toward a common, or at least more closely coordinated academic schedule.

Course consolidation is only in the beginning stages, but there is clear indication that many effective savings can be achieved and in many instances programs maintained which might otherwise necessarily be dropped by the smaller institutions. The same thing is true of faculty exchange, especially in areas where student demand is fairly limited, and consideration is therefore being given to some joint faculty appointments.

1c. Library Activities and Programs

Cooperation in the library area is one of the most outstanding successes of Consortium operations during the past three years. Books and materials are being regularly exchanged and students thus have access to a total resource of many times that of their own institutions; the same is true of faculty. Studies initiated by the DMVC Library Division clearly indicate the need for heavily increased periodical, serials, and book holdings, but with careful advanced planning to avoid unnecessary duplication. The need for a Union Catalog is very great. The Special Purpose \$100,000 Library Grant by the Office of Education filled a very large need, but it is clear that much more funding is necessary to increase the total resources of the Consortium, particularly

in the area of large and expensive collections, which nevertheless can be made available for use by all institutions.

1d. Learning Resources Circuit

There is positive value and economy in the sharing of audio-visual materials, thereby reducing the need for expensive duplication. A much more extensive inventory of all audio-visual resource materials and equipment in Consortium institutions needs to be done. The present total film and filmstrip collection of Consortium institutions is inadequate and needs to be greatly expanded. The committee has undertaken studies looking toward funding for this particular project.

1e. Educational Television

As educational television in the Miami Valley area approaches reality, there is obvious need for more of the Consortium institutions to develop skills in ETV programming. Leadership in this area can be provided by the University of Dayton, which already does a good deal of closed circuit TV instruction. The possibility of developing instructional television for point-to-point broadcast to all member institutions, using the antenna in Yellow Springs with a 2500 Megahertz system, has great potential, and studies will go forward immediately in this area now that realization of regular ETV through Channel 45 is at hand.

1f. Institutional Working Committees

The activities of all these committees have well demonstrated the value of cooperation as a means of improving administrative procedures effecting economy of operation, broadening and enriching student curricular programs, building on existing strengths within Consortium institutions, and minimizing institutional weaknesses through cooperation.

1g. Joint Community Service Activities

The increasing number of these activities, their acceleration in size and diversity, and their warm reception by the wider community clearly demonstrate the large and important need which has existed in this area. In discharging their public service obligation through such activities and others planned for the future, Consortium institutions are also vastly improving their public image and strengthening their base of public support.

1h. Area Studies

The two programs already developed within the Consortium have illustrated the advantages to be gained by the pooling of faculty resources, the enrichment of programs, and the widening of faculty horizons as members of different institutions come together for a common purpose to help develop programs which meet student needs and interests throughout the entire Consortium. The success of the existing programs encourages us to explore additional possibilities in Area Studies.

2a. Function of R & D Officers in Research

The record of the past two and one half years clearly shows the positive increase in individual faculty research in most Consortium institutions, particularly in those less well-established and less experienced in research. Consortium R & D Officers have been an important factor in this development, through encouraging, assisting, and helping the individual faculty members in the development and successful funding of research projects.

2b. Feasibility Study on the Establishment of a Joint Bureau of Government Research, etc.

The pilot study undertaken by the Consortium effectively demonstrated the need for this function in the Miami Valley area, and subsequent developments have corroborated it. The problem of funding has been a serious one but appears to be nearing solution as individual institutions, together with the Consortium, move toward the development of wider activities in the entire area of Urban Studies and Research.

2c. Miami Valley Project

The cooperation, interest, and assistance afforded to us by officers and staff of the Miami Valley Project have stimulated a wider faculty participation in areas of research affecting the project, especially in environmental areas.

2d. Faculty Data Bank

Although a seventy-five percent return of information for the data bank is excellent, still it would be much more desirable to have closer to one hundred percent return. Continuing effort will be made in this direction, as well as for the necessary updating to reflect changes in faculty personnel. The value of the data bank has already been demonstrated in a number of ways, both as a resource of expertise internally in the Consortium, and externally for a variety of community service activities. The need for such a reference was demonstrated by an editorial appearing in the Dayton Journal Herald on November 24, 1967, shortly after formation of the Consortium, pointing out the desirability of inventorying educational facilities and resources in this area. (See appendix for copy of this material.)

2e. Retraining of Teachers and Administrators

The intensive activity involved in preparation of the pilot proposal in which all Consortium institutions were represented gave valuable experience in coming to an understanding of the urgent needs of education for the disadvantaged. It became clear, for example, that so far as attitudes are concerned it is much more important to change the attitudes of teachers, administrators, school board members, and parents, rather than that of the children -- the latter will follow if the former is accomplished. The study also made apparent the need for massive revisions of many aspects of the curriculum for the training of teachers in higher education. Although the pilot proposal was not funded the interest in the area continues on the part of Consortium faculty and we anticipate further developments.

2f. Manpower Proposal

The studies and discussions initiated by the proposal committee with leading members of community agencies showed that there exists a very large need for research and a variety of services in the manpower area. The development of more effective curricula in manpower training and research in the areas proposed are of major importance. Although this project was not funded, it will not be dropped, and further activity in this area will go forward.

2g. COSIP Proposal

The cooperative activities of members of the chemistry departments of the five institutions involved, which antedated the development of the proposal, together with the cooperation and joint effort involved in developing the proposal itself, reveal the very large opportunity for strengthening of science departments in small institutions, through the acquisition of shared equipment and the development of computer uses for instruction, problem solving, and research on the part both of students and of faculty. A major effort in this area will be continued.

2h. Student Research in Educational Innovation

Although the project was only in the beginning stages at the end of the period covered by this report, it appears to have excellent potential, and if it is carried out in accordance with current plans could very well become a vehicle for a major Consortium undertaking next year in the area of innovative curriculum development for the entire Consortium.

2i. Computer Terminals, etc.

The availability at modest cost to our smaller less-sophisticated institutions of high-speed computer services for research and instruction, whether directly or through remote terminals, has provided a real stimulus both to students and faculty in a variety of research activities made much more feasible or practicable through computer use.

The activities of the Consortium committee on CAI have actively developed widening interest in this important area of instruction, together with appropriate research in the field. It is anticipated that even without outside funding CAI will be increasingly widely used throughout member institutions of the Consortium in the immediate future.

III CONCLUSIONS

The development and research-related activities of the Dayton-Miami Valley Consortium, described in this report, together with many other activities, projects, and programs of the Consortium during the past two and one half years, have unquestionably enabled us to make significant progress toward the accomplishment of our basic objectives:

1. Through cooperation to share as much as possible the human and material resources of all members, leading to enrichment and greater development of all programs and undertakings for the benefit of all members of the university and business communities.
2. Through such sharing, cooperative planning, and purchasing to reduce the costs of operation and hopefully the cost of education to the student, by avoiding unnecessary duplication.
3. To improve and enhance the instructional and research capacity of all member institutions through a variety of technical resources, and by making faculty and administrative expertise available to those member institutions not as far advanced in these respects.
4. Through cooperative study and research to improve administrative services and activities throughout all member institutions.

In addition the experience of the past two and one half years has demonstrated the effectiveness of the Consortium approach in attracting outside financial support, and in developing mutually beneficial programs hardly possible if done on an individual basis. Examples of this are: the Ambassador-in-Residence program; the \$100,000 Library Special Purpose Grant; the Retraining of Teachers and Administrators project, together with a number of other federally-supported interinstitutional projects in law enforcement and social work; increased work-study funds making possible greater participation in the Urban Corps; the VISTA programs; the Headstart Supplementary Training Programs; the College Science Improvement program; development of Educational Television; computer services; plans for the Educational Research Park; Area Studies programs; and Cross-Registration and Course Consolidation, with faculty exchange.

Many of the social action programs of the Consortium have undoubtedly developed a much greater impact upon community and urban needs when done jointly rather than through individual programs and projects done separately by individual institutions. In these cases the whole has been demonstrated to be greater than the sum of its parts.

For some of the smaller institutions the Consortium approach has been an important means of survival in pressing financial circumstances. To all institutions it has meant a strengthening of the totality of

programs; better, more significant, and more meaningful education for all students; greater and more relevant service to the community and to the public; and more effective impact upon current problems of society, and in particular local urban needs.

At the same time, Consortium activities have also demonstrated some inherent weaknesses in the cooperative approach. There still remain problems of individual sovereignty (although the Consortium organization goes to considerable lengths to avoid infringing upon such individual sovereignty) and the persistent myth of institutional self-sufficiency. These problems tend to diminish under the hard financial pressures of the present and future, but ingrained attitudes of self-sufficiency especially on the part of many faculty are difficult to change. Thus there is and can be a dangerous tendency for consortia to concentrate on the fringes of academic programs, but not the inner core. The need for constant and more effective communication among all members of the Consortium community is very great, and the DMVC office has made many and varied attempts to meet this deficiency through bulletins, discussion groups, meetings, newsletters, and other use of media. Changes in traditional attitudes are coming, to be sure, at first often with agonizing slowness, but still with ever-increasing intensity. Full cooperation, though difficult to achieve, is an essential goal for colleges and universities, and must form a large part of the answer to the problems of higher education in the future.

Perhaps the best single indication of the success of the Dayton-Miami Valley Consortium in achieving its objectives during the past two and one half years has been the fact that the termination of the Office of Education CORD Grant during the present year made it urgently necessary for the Trustees of the Consortium to face and solve the problem of financing the Consortium office and its activities for the immediate future, or else to terminate the arrangement. The Trustees, by unanimous vote, agreed to provide from increased membership fees full funding for the Consortium office, beginning with the next fiscal year on July 1, 1970, and even to provide additional funding for more personnel. This requires an increase of institutional annual membership fees from a minimum of more than two times as much as at present to a maximum of eight or nine times as much.

Ref. Page 2

DMVC

IV: SUPPLEMENTARY AND
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7/30/68

THE PRESIDENT

Ref. Page 6



DAYTON-MIAMI VALLEY CONSORTIUM

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COMPUTERS AND COMPUTER-ASSISTED INSTRUCTION IN ENGINEERING

The Dayton-Miami Valley Consortium, with the assistance of the University of Dayton Department of Computer Science, is offering, as a free service to interested Consortium faculty members, a one-week program, Computer-Assisted Instruction, with emphasis on Engineering and related topics. No prior knowledge of computers or computer programming will be assumed. Sessions begin August 19.

Emphasis will be on time-sharing systems and their utilization as an instructional tool. Computer terminals will be used and each participant will be given the opportunity to make use of them. Small groups will be formed so that problems of particular interest can be discussed and solved. Arrangements have been made with Time-Sharing companies in order that about twenty-five faculty members may each have the use of a terminal for about 5 hours in the week. Instruction in terminal use, and in the language Basic will be given. Each person will be encouraged to plan a use of the terminal in a typical course or classroom situation.

The principal speaker will be Lt. Col. William F. Luebbert of the U. S. Military Academy, who has had several years experience in CAI. He received the "Automation Educator of the Year" Award in 1966, and the 1968 Western Electric Fund Award for "Excellence in Instruction of Engineering Students." He is Chairman of the Computers in Engineering Committee of the American Society for Engineering Education. Dr. Luebbert will demonstrate the use of the terminal as an instructional aid in a typical classroom environment.

The analog computer will be discussed and demonstrations will be given in its use. Dr. Glenn Atwood of the Department of Chemical Engineering, University of Akron, will make the presentation. Dr. Atwood is very active in the analog field, and is a member of the Analog/Hybrid Computer Educational Users Group (ACEUG).

The concept of Computer-Assisted Instruction will be reviewed with workshop periods scheduled. Guest lecturers have been invited to discuss their work in CAI. Discussion periods will follow. We want the thoughts of the faculties of the Universities and Colleges of the Consortium. We can and should develop a capability in CAI.

A number of companies are giving their support to this program by supplying computer time and personnel. Included are:

General Electric, Time-Sharing Systems
Electronic Associates Incorporated, Analog Computers
IBM
Calcomp, display graphics
MISCO, computer services

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☐ University of Dayton ☐

☐ Urbana College ☐

☐ Wilberforce University ☐

☐ Wilmington College ☐

☐ Wittenberg University ☐

☐ Wright State University ☐

***HOST**

(Read the reverse side)

CROSS REGISTRATION CONDITIONS

The following conditions must be met by a student of one Consortium Institution desiring to register for a course in another Consortium Institution:

1. The student is regularly enrolled as a full-time student of a Consortium institution carrying at least a minimum full course load at HOME institution.
2. The student has obtained the proper approval(s) from his HOME institution.
3. The desired course is not currently available at the HOME institution.
4. The student has satisfied all the course prerequisites and is acceptable to the HOST institution.
5. That space is available in the desired course.

CONSORTIUM POLICY

Regularly enrolled full-time students of Institutions within the Consortium may register for credit in courses offered by other Consortium Institutions at no additional charge, on a space available basis. This policy applies ONLY to the regular sessions of the Institutions academic year, and specifically excludes summer sessions and other self-supporting or self-sustaining programs.

LIBRARY PROFILE DATA OF DAYTON-KENT VALLEY CONSORTIUM

	Enrollment Undergrad.	Enrollment Gradu.	Faculty	Staff Prof. Clerical	Volumes	Periodicals Continuity Received	m/klm	Non-book materials m/records m/records	other	Sq. ft.	Facilities Vols.	Seating			
Air Force Institute	260	360	253	7	12	90,000	1,200	600	120,000	65,000	120	30	18,000	400	
Antioch	1,800	40	118	7	17	150,000	1,060	2,623	18,516	1,225	3000	4000	45,000	175,000	350
Cedarville															
Central State															
Sinclair Community	1,300	40	68	3	2 1/2	150,000	210	357			147		5,220	13,000	100
University of Dayton	8,535	439	450	18	21	255,000	3,262	2,400	975	2,140	525	1790	44,000	250,000	800
Urbana															
Wilberforce			43	2	3 1/2	38,000	240	302	10		71	108	7,892	45,000	150
Wilmington	901		54	3	4	61,255	553	677	588		1169	564	21,594		
Wittenberg	2,339	110	196	10	19	176,000	1,169	3,210	435	555	8755		38,500	200,000	
Wright State	3,199	134	213	8	21	93,000	2,000	1,173	7,725	341	1364		43,500	140,000	725

1/23/68

Ref Page 2



Ref. Page 14

DAYTON MIAMI VALLEY CONSORTIUM

300 College Park Avenue • Dayton, Ohio 45409, Phone 513-224-1204

THE CHANGING ROLE OF STUDENTS IN COLLEGE GOVERNANCE

A day of dialog and communication among faculties, students and administrators of the Dayton-Miami Valley Consortium.

WRIGHT STATE UNIVERSITY

Saturday, April 19, 1969

10AM - 4PM

OELMAN HALL AUDITORIUM

SCHEDULE OF EVENTS

Morning

10-11 Welcome and Introduction. Dr. Charles J. Armstrong, President, Dayton-Miami Valley Consortium

PANEL DISCUSSION. Dialog between students, faculties, and administrators. Topic: "WHO HAS THE POWER IN UNIVERSITIES? HOW SHOULD POWER BE REDISTRIBUTED?"

11-11:30 Audience questioning and participation.

11:30-1 Break for lunch and conversation. An inexpensive lunch will be prepared by the college dining services.

Afternoon

WORKSHOPS AND SEMINARS

All of these will be held during each of the afternoon slots in order that each participant may attend two that most interest him.

1. THE UTOPIAN UNIVERSITY: AN EXERCISE IN IMAGINATION
2. WAYS OF ACHIEVING CHANGE IN THE UNIVERSITY: FOCUS ON STRATEGIES FOR CHANGE.
3. INTERCAMPUS COMMUNICATION: FOCUS ON DMVC CROSS-REGISTRATION
4. EDUCATION: THE SEARCH FOR RELEVANCY --
 - * The changing classroom.
 - * New relationships between student and teacher.
 - * Curriculum: What is and isn't worth studying.

1:00-2:00 First workshop/seminar period

2:15-3:15 Second workshop/seminar period

3:30-4:00 Questioning, comments from all interested panelists, workshop leaders.

END OF DAY

TITUTIONAL MEMBERS

Force Institute of Technology
ton, Ohio 45433

och College
ow Springs, Ohio 45387

arville College
arville, Ohio 45314

tral State University
erforce, Ohio 45384

iversity of Dayton
ton, Ohio 45409

lair Community College
ton, Ohio 45402

ana College
ana, Ohio 43078

erforce University
erforce, Ohio 45384

nington College
nington, Ohio 45127

enberg University
ngfield, Ohio 45501

ht State University
ton, Ohio 45431

OCIATE MEMBERS

Heart Institute
ening, Ohio 45429

ineering Foundation of Dayton
ton, Ohio 45402

idare Drive-on
eral Motors Corporation
ton, Ohio 45402

national Business Machines Corporation
ton, Ohio 45402

an Information Services Company
ton, Ohio 45409

santo Research Corporation
ton, Ohio 45418

onal Cash Register Company
ton, Ohio 45409

Ref. Page 15

AGENCIES INVOLVED WITH THE URBAN CORPS PROGRAM

CITY AGENCIES

Building Services
Department of Community Development
Division of Corrections
Model Cities Planning Council
Division of Parks and Recreation
Youth Opportunity Program
Accounting

NON-CITY AGENCIES

Dayton Art Institute
Board of Education (Multiple Motivation)
Dayton Boy's Club
Dakota Street
Miami Valley Child Development Centers
Salvation Army
Urban League
Wesley Center
Young Women's Christian Association

V. AGENCY ORIENTATION

1. ACTION, INC. (8 Volunteers)

On the first day of orientation, VISTA Volunteers decided to center their efforts on the Consumer Survey, throwing out the idea of a housing survey. From that point, work began on bringing together a standard form for collecting information on food prices. The suspicion was that ghetto members pay higher prices for lower quality food and that this is just another form of exploitation of the poor. ACTION orientation focused on an understanding of the problems of the ghetto members, with an eye to planning action against key store owners.

2. DAYTONVIEW STABILIZATION PROJECT (5 Volunteers)

The Daytonview Project operates on the assumption that no new program can be ignored, so that each day new efforts are taken up. The agency simply put the VISTA Volunteers to work after one day of general introduction. They became involved in the care of children, recreation, clean-up campaigns, adult seminars, welfare rights, zoning code and housing code enforcement, and other efforts too numerous to mention. Volunteers assigned to other agencies became part of the Daytonview projects because of their residence within the area, particularly the police volunteers.

VISTA
SUMMER ASSOCIATES PROGRAM

3. DAYTON METROPOLITAN HOUSING AUTHORITY (5 Volunteers)

At both Arlington Courts and at Parkside, orientation for VISTA Volunteers was limited to meeting key people in the project community. In both cases project directors attributed the lack of formal orientation to a lack of personnel to organize such a program. This condition was suitable since there seemed to be little need for a formal orientation. VISTA Volunteers went about their business, meeting community members and familiarizing themselves with community problems from several individuals' points of view.

4. DAYTON POLICE DEPARTMENT (8 Volunteers)

The Police Department came up with the major part of their orientation without staff assistance, in consonance with their community relations program efforts. The eight Volunteers were given instruction in the policeman's responsibility and function, first aid, and social referral. The orientation took eight days, the longest of any agency orientation. The Police also carefully screened Volunteers above and beyond the screening required by VISTA.

Ref. Page 19

CENTRAL STATE UNIVERSITY
UNIVERSITY RESEARCH REPORT

June 1968 - February 1970

By Dr. D. T. Holmes
Consortium Representative

Department of Biology

<u>Title</u>	<u>Investigator</u>	<u>Sponsoring Agency</u>
"Effect of U.V. - irradiation on DNA, "Photodynamic Action,"	D. T. Holmes Ralph Davison (Student)	Research Corp. of America
"Sub-lethal Influence of Pollutants on Fish Metabolism"	J. O'Hara Timothy Bahns (Student)	Dept. of Interior University
"The Effect of Trace Element Deficiencies Rats"	Melvin A. Johnson, Jr. Ssali Luwemba & (Students) Carol Markley	University
Research on Melanogenesis	Thomas J. Craft	University
The Functional Regeneration of Hepatic Blood Vessels	Melvin A. Johnson, Jr.	The Miami Valley Heart Chapter

Department of Earth Science

Investigation of Magnetic Direction in some Permian Igneous Rock from Nevada	Beverly McMahon	University
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Department of Chemistry

Research in Chemiluminescence	L. Shelbert Smith Elwood Brooks	NSF
Studies on the Behavior of Polar and Non-Polar Molecules	Vijay K. Gupta	University
Studies on the Acid-Catalysed Rearrange- ment of Aroxynaphthalenes	Kandiah Mahendran	University
Amperometric Titration of Two Component Systems: Simultaneous Determination	Bernard H. Johnson	University

Department of History

Research on Current Biographers in Black America	Wilhemena Robinson	University
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Department of Mathematics

"Some Aspects of Mathematics Programs for Under Achievers"	Thyrza Svager Neelia Thompson (Student)	NSF
"Computer Logic"	Thyrza Svager Edmond Taylor (Student)	NSF
"Selected Problems in General Topology"	Thyrza Svager Margaret Dennis (Student)	NSF
"Matrices"	Thyrza Svager Gholam Parvand (Student)	NSF
"Some Problems in Differential Equations"	Thyrza Svager Joyce Jones	NSF

Department of Physics

Research on teaching of Newtonian Mechanics	Richard Burling	University
Research on crystal defects	Aleksander Svager	University

Department of Psychology

A Study of the use of sampling theory in test construction; development of a probability method of scoring tests to correct for guessing	Richard Wienke	University
A study of the relationship between Study Habits and Attitudes and academic performance for students in General	Eugene L. Runyon	University
A study of the Self Concepts and Study Habits and Attitudes of Upward Bound Students	Eugene L. Runyon	University

Department of Sociology

Research on attitudes on black awareness and social distance	Anes W. Chapman	University
A study on alcoholism in the Chillicothe area	Allvar Jacobson	University
Research on ethnomusicology	Warren James	University

Department of Political Science

The Determine Arab attitudes since 1955
on the Civil Rights movement in the
United States

Fuad Suleiman

Southern Fellowships
Funds



Ref. Page 19

Wilberforce University

Wilberforce, Ohio 45384

RECEIVED

MAY 22 1970

**PRESIDENT'S OFFICE
D M V C**

America's First College owned
and operated by Negroes

Dean of Faculty

May 20, 1970

Dr. Charles J. Armstrong, President
Dayton-Miami Valley Consortium
300 College Park Avenue
Dayton, Ohio 45409

Dear Charles:

We are listing below (with apologies for delay) our research grants since the beginning of our Title III Faculty Development program:

1967-68

Dr. C.W.P. Hansen	\$1,050 - "Creativity in Old Testament Thought."
Dr. Gene Reeves	50 - Philosophy: Research on A.N. Whitehead.
Dr. Surinder Saini	860 - Genetics: Research on Hybrid Corn Seed.
Dr. Roger Wilcox	240 - Psychology: Project in Student Psychology (Computer Expenses).

1968-69

Dr. Gene Reeves	400 - Philosophy: Research on A.N. Whitehead.
Dr. Surinder Saini	400 - Genetics (as above, continued).

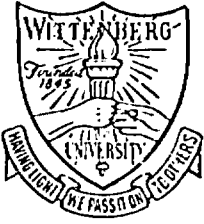
1969-70

Dr. Natividad Barranda	200 - Mohammad Iqbal's Islamic Philosophy.
Mr. James Hart	100 - Market Research Price Comparison Equipment.
Mr. James Hart	100 - Laboratory Animal Equipment for Research on Olfactory Cues re Tolman's "latent learning."
Dr. Surinder Saini	200 - Genetics: Hybrid Wheat Chromosome Behavior (Inter-specific Germ-plasm).
Mr. James Siwo	150 - Market Development Research, Xenia/Wilberforce Area Small Business Development

All of these funds were programmed under Title III-Faculty Development, conceived of as ways of encouraging small research projects. We might list 3 grants of \$1700 each for a total of \$5,100 to Dr. Saini (2) and Dr. Pilar de la Aguilera on plant genetics and drug chemistry respectively in each of two summers, 1968 and 1969. These were more in the nature of living or released-time grants to enable faculty to do research under cooperative placement arrangements. They were slightly different from direct research grants, yet they contributed to research. These were also under Title III Faculty Development auspices.



Ref. Page 19



Wittenberg University

SPRINGFIELD, OHIO

May 4, 1970

INSTITUTIONAL RESEARCH

These are the names and research projects which were awarded during January 1969 - to the present.

<u>Name</u>	<u>Project</u>	<u>Source of Funding</u>
Dr. Terry Otten	"A study of the search for dramatic form in Nineteenth Century English literature"	Board of College Education and Church Vocations - Lutheran Church
Mr. Stephen Barnes	"A study of Nineteenth Century French literature"	Board of College Education and Church Vocations - Lutheran Church

The following faculty were awarded funds from Wittenberg's Faculty Research Fund:

Dr. Conrad Balliet	Research projects on: Eighteenth Century poets in England; research on a black studies institute; poetry of Yeats; and history of the couplet since Pope.
Dr. Paul Miller	Two projects: Renaissance wedding poems; and study of class conflict leading to the Civil War of 1642.
Dr. J. Roy King	Research on Renaissance Psychology.
Dr. Charles O'Brien	Two research projects: Erasmus' "Idea of Toleration;" and "Thought of Jakob Burkhardt."
Dr. Joseph O'Connor	"A Study of Nikolai Aleksweevich"
Dr. Charles O'Brien	Ideas of religious toleration in Austria at the time of Joseph II.
Dr. Cynthia Behrman	"Mythology of the sea in Victorian England"
Dr. George Dudycha	"A guide to the literature in psychology for research purposes."
Mr. George Ramsay	Research in the use of multi-media.

May 4, 1970

<u>Name</u>	<u>Project</u>
Dr. Charles Chatfield	The 1969-70 War Moratorium Committee.
Mr. Everett Bush	Independent study of geographical landmarks in Australia.
Dr. Richard Ortquist	A political study of the New Deal in Michigan.
Dr. Eric Wilson	Mathematical research at Vanderbilt University.
Dr. Balwir Singh	Study of the role of agriculture in Iran.
Dr. Nelson Sartoris	Research in Chemistry.
Dr. Donald Watson	Research in Biology.
Dr. Arthur Faber	Research in English.
Dr. Henry Cross	Research in Psychology.
Dr. Edwin Boling	Research in Sociology.

The following research projects were supported by the College Science Improvement Program (COSIP) which is funded by the National Science Foundation of the federal government:

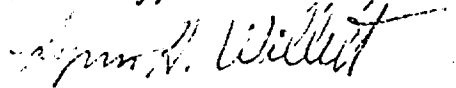
Dr. Donald Watson	Monogenetic trimadedes of elcesmbranches in Central America freshwater fishes.
Miss E. Powelson	An investigation of a protozoan's ultra-structure.
Dr. Albert Frasca	Development of a 400 KEV. accelerator facility.
Dr. Robert Beyer	Research in charged particle scattering and neutron radiography.
Mr. John Hitt	A study of calcium metabolism by mitochondria isolated from the calciferous gland of the earthworm.
Mr. Louis Laux and Mr. Richard Crang	"Non-breeding surplus and the population structure of the Franck-Herte, Planck constant, and speed of light experiments.
Dr. Paul Hagelberg	"Physical acoustics - a measurement cell for sound absorpt. and velocity studies."
Mr. R. Crang	"An investigation into the organization and development of pollen grain walls."
Miss Gloria Cassens	"Study of the maternal effect of gene <u>o</u> in the Mexican axolotl."

May 4, 1970

<u>Name</u>	<u>Project</u>
Dr. R. deLanglade	"Investigation on the morphogenesis of the epidermis of Begonia Masoniana, Iron-Cross Begonia."
Dr. Harold Sundelius	Study of the Carolina slate belt.
Mr. Wallace Giffen	"Elastic scattering of Be^{++} in He - interatomic potentials."
Miss Gloria Cassens	"A study of differentiation of mitochondria in brown adipose tissue of rat embryos."
Dr. Nathan Bolls	"The development of a long-term investigation of the physiology of the tree squirrels."
Dr. Robert Borden	Developed an undergraduate research program.
Dr. Howard Curry	Research on the preparation of parallel acetylenes.
Dr. Rolf Hahne	Research on the chemical effects of the Br^{80m} nuclear isomeric transition.
Dr. John Abma	An investigation of instinctive drift in the white rat.

These are all the research projects that I am able to identify.

Sincerely,



Lynn H. Willett
Director of Institutional Research

LHW:bs

RESEARCH PROJECTS IN PROGRESS
WRIGHT STATE UNIVERSITY
January 1, 1968 through February 28, 1970

Ref. Page 17

<u>Project No.</u>	<u>Period</u>	<u>Supervisor</u>	<u>Title</u>	<u>Sponsor</u>	<u>Award</u>
			<u>Office of the Dean, Science & Engineering</u>		
116	6/25/68 - until expended	Robert Conley	Institutional Grant for Science	National Science Foundation	\$4,000
150	11/26/69 - until expended	Robert Conley	Institutional Grant for Science	National Science Foundation	\$4,000
			<u>Biology Department</u>		
100	1/1/68 - 12/31/68	Prem Batra	Mechanism of Photo-induced Carotenoid Synthesis	National Institute of Arthritis and Metabolic Diseases	\$32,523
119	3/1/68 - 4/30/69	Shigeru Honda	Structure & Function of Plant Organelles	National Institute of Gen. Medical Science	\$225
123	11/1/68 - 12/31/69	Marvin Seiger	Genetics Research	W. S. U. Foundation	\$600
124	12/1/68 - 11/30/69	Ira Fritz	Early Development of American Marsupials <u>in vitro</u> .	N. S. F. Institutional Grant, Sub Grant Project 116	\$700
131	1/1/68 - 12/31/69	Prem Batra	Mechanism of Photo-induced Carotenoid Synthesis	National Institute of Arthritis and Metabolic Diseases	\$28,875
132	1/1/68 - 12/31/70	Jerry Hubschman	Endocrine Control of Metamorphosis in Larval Shrimp	National Science Foundation	\$14,600
134	5/1/69 - 11/30/69	Marvin Seiger	Genetics Research	N. S. F. Institutional Grant, Sub Grant Project 116	\$100

Research Projects in Progress
WSU - 1/1/68 - 2/28/70

- 2 -

<u>Project No.</u>	<u>Period</u>	<u>Supervisor</u>	<u>Title</u>	<u>Sponsor</u>	<u>Award</u>
138	5/1/69 - 4/30/70	Emil Kmetec	Comparative Bio - chemistry of Purine Nucleoside	National Institute of Arthritis and Metabolic Diseases	\$26, 675
149	11/1/69 - 10/31/70	Brian Hutchings	Tetracycline Resistance in <u>Staphylococcus Aureus</u>	Public Health Service NIH Institute of Allergy & Infectious Diseases	\$36, 975
<u>Chemistry Department</u>					
103	1/1/68 - 8/31/70	Gordon Skinner	Kinetics of Hydrocarbon Reactions	Petroleum Research Fund, Am. Chemical Society	\$20, 369
104	1/1/68 - 8/31/68	Rubin Battino	Gas Solubilities in Selected Solvents & Solutions	National Institute of Gen. Medical Science	\$20, 020
105	11/27/67 - 9/30/69	Robert Conley	Research on Mechanisms of Thermooxidative Degradation of New High Temperature Polymers	U.S.A.F. Aeronautical Systems Division	\$90, 046
106	10/27/67 - 10/31/69	James Kane	Academic Year Extension Grant	National Science Foundation	\$2, 300
120	9/1/68 - 8/31/69	Rubin Battino	Gas Solubilities in Selected Solvents & Solutions	National Institute of Gen. Medical Sciences	\$31, 757
126	11/1/68 - 11/30/69	George Hess	Mechanism of Amino-mercuration Reaction	N.S.F. Institutional Grant, Sub Grant of Project 116	\$750

<u>Project No.</u>	<u>Period</u>	<u>Supervisor</u>	<u>Title</u>	<u>Sponsor</u>	<u>Award</u>
139	6/1/69 - 5/31/70	George Hess	Mechanism of Amino-mercuration Reaction	National Institute of Gen. Medical Sciences	\$15,432
147	9/1/69 - 8/31/72	Sue Cummings	Synthesis & Characterization of Metal Complexes Containing Macrocyclic Ligands	Petroleum Research Fund, Am. Chemical Society	\$7,500
148	9/1/69 - 8/31/70	Rubin Battino	Gas Solubilities in Selected Solvents & Solutions	National Institute of Gen. Medical Sciences	\$28,119
151	12/29/69 - 10/31/70	David Karl	Undergraduate Research Participation	National Science Foundation	\$4,870
<u>Geology Department</u>					
125	12/1/68 - 11/30/69	Paul Pushkar	Isotopic Composition of Strontium in Naturally Occurring Rocks	N. S. F. Institutional Grant, Sub Grant of Project 116	\$740
128	12/1/68 - until expended	Kenneth Kramer	Control of Oxygen Polarization on Element Fractionation between Coexisting Phases	N. S. F. Institutional Grant, Sub Grant of Project 116	\$700
<u>Mathematics Department</u>					
107	10/27/67 - 10/31/67	Krishan Gorowara	Academic Year Extension Grant	National Science Foundation	\$2,300
<u>Physics Department</u>					
121	11/1/68 - 10/31/69	David Wood	New Measurement & Analysis in Pb II Spectrum	Research Corp.	\$2,000

Research Projects in Progress
WSU - 1/1/68 - 2/28/70

-4-

<u>Project No.</u>	<u>Period</u>	<u>Supervisor</u>	<u>Title</u>	<u>Sponsor</u>	<u>Award</u>
122	11/1/68 - 10/31/69	Joseph Hemsky - Paul Wolfe	Study of Analog States in the Medium Z Isobaric Nuclei ^{35}Cl & ^{35}S	Research Corp.	\$4,000
143	6/30/69 - 6/29/72	Harvey Hanson	Cooperative Research Program in High Temperature Physics	U. S. A. F. Aerospace Research Labs	\$290,300
<u>Psychology Department</u>					
127	12/1/68 - 11/30/69	Rand Evans	Edward Bradford Titchener - His Life and System	N. S. F. Institutional Grant, Sub Grant of Project 116	\$450
146	9/10/69 - 12/31/69	Malcolm Ritchie	Study of Visual Sens- ing Rate Information	U. of D. Research Institute	\$4,964
153	1/22/70 - 7/22/70	Ronald Smith	Evaluation of Display at Intermediate Visual Distance	U. of D. Research Institute	\$3,420
<u>History Department</u>					
144	9/1/69 - 8/31/70	Jacob Dorn	A Cooperative Dayton History Project	National Science Foundation	\$24,300
<u>Biology Department (Addendum)</u>					
145	5/1/69-4/30/70	Prem Batra	Fellowship Supply Grant	PHS, NIH National Institute of Neuro- logical Diseases & Stroke	\$1,000

Ref. Page 21

MIAMI VALLEY PROJECT

Below is listing of DMVC Faculty participation in Miami Valley Project:

University of Dayton

Joseph J. Cooney, Ph.D., Biology, "Terminal synthesis of xanthophyll pigments." The Project assisted Dr. Cooney in making contacts with the Federal Water Pollution Control Administration and the American Petroleum Institute.

Antioch College

Wladyslaw M. Lotkowski, Ph.D., and David A. Rock, Ph.D., Geography, "Determination of the Recreational Carrying Capacity of Free-flowing Rivers," submitted under Project aegis to NSF, rejected April 1969.

Wilmington College

Philip L. Bayless, Ph.D., Chemistry, "The Quality of Rural Environments." Submitted to NSF under aegis of MVP, no action as yet.

Martin Gerhard Giesbrecht, Ph.D., Economics, "An Economic Synthesis of Environmental Research Council with support from MVP, rejected. Submitted to NSF with MVP support, no action as yet.

Wright State University

Jacob H. Dorn, Ph.D., Carl Becker, Ph.D., Paul G. Merrian, Ph.D., History, "A Cooperative Dayton History Project." Submitted to NSF under MVP aegis, funded September 1, 1969.

Sherwin J. Klein, Ph.D., Psychology. "The Effects of Religious Education on the Ethical Values of College Students," preliminary proposal discussed with MVP July 1969. Final proposal has not been received.

A proposal to develop means of locating ground water sources and aquifers has been submitted by a geologist from Wright State. This proposal is being reviewed by a member of the University of Cincinnati geology department.

As part of the proposed study of Appalachian white and Southern black migrants in the Miami Valley, a proposal was submitted by sociologists Ames Chapman and Alvar Jacobsen of Central State. It was submitted to the International Biological Program, which solicited this study.

Ref. Pages 19 and 31

**FEASIBILITY STUDY
ON THE ESTABLISHMENT
OF A
JOINT GOVERNMENT
RESEARCH BUREAU**

Richard T. Conboy, SM

**Sponsored by
The Dayton -
Miami Valley
Consortium
1968**

TABLE OF CONTENTS

Introduction	1
I Results of the questionnaire to the governmental units	3
Governmental units' forecast of bureau use	3
Table I: Projected use of bureau by type of unit	3
Demand for individual services	6
Table II: Services needed, by type of jurisdiction	7
II Results of the Consortium questionnaire	9
Table III: Available Consortium personnel, by departments	9
III Recommendations	12
The concept of university-government relations	12
Matching needs with resources	14
Alternative forms for the research bureau	16
Establishment of a co-sponsored bureau	18
IV Provisions for funding	23
Federal government support	23
Foundation support	27
V Bureau relations with research agencies	28
VI Summary	30
Appendix A: Questionnaire to the governmental units	31
Appendix B: Questionnaire to the Consortium	35

INTRODUCTION

The Joint Government Research Bureau feasibility study was undertaken by the Consortium to (1) determine the extent to which the local governmental units would support a bureau on a contract basis, (2) inventory the Dayton - Miami Valley Consortium (hereafter referred to as the Consortium) resources, and (3) study the availability of grants and other types of funding.

The study identified the needs of the governmental units and the opportunities which would serve the personnel from the educational institutions as practical experiences for the exercise of their specific competencies. At the same time, the resources of the universities and colleges were catalogued. The central point of the study then became recommendations about the instrumentality for relating the resources to the needs, for the mutual benefit of both interests.

The initial stage of the study required the collection of basic data concerning the governmental units and quasi-public agencies in the nine county region. The types of units considered in the inventory were counties, cities, villages, townships, school districts, special districts and various multi-county agencies. The information gathered included population statistics, budgets of the units, employment statistics, forms of government, and average daily attendance of the school districts.

With the aid of these data, a sample of the units was chosen for a survey. The survey questionnaire was in two sections. The first section consisted of a list of twenty-eight services, either of a continuing or short term nature. Each respondent could choose any of four responses: the service was not needed for the future; possibly needed for the future; adequately provided currently; or in need of improvement. In evaluating the responses, the second and last categories would be considered positive

indications of services for which the research bureau might find a market. The second part asked the units to list the projects that they had contracted for in the past three years.

These questionnaires were distributed to 130 units. Forty-three (33% of the sample) responded. Five of the nine counties, fourteen of the eighteen cities, nine of the thirty-nine villages, two of the thirty-five townships, nine of the twenty school districts, and six of the special districts and agencies responded.

To gain an accurate estimate of the degree of Consortium involvement in a research bureau, sample departments from ten of the Consortium institutions were surveyed. The objective was to examine the resources as well as the interest of the full-time faculty, the number of full-time majors, both graduate and undergraduate, and the character of cooperative or internship programs, if any.

The third stage of the study considered the possibility of receiving federal funds or foundation grants for the initial operation of the bureau. This involved research into the availability of grants under the federal educational acts and programs established to cope with urban problems.

Appreciation is expressed to the Dayton - Miami Valley Consortium for funding the study; to the jurisdictions and institutions which cooperated in the survey; and to Sinclair Community College for the use of their facilities. The advice of Prof. Edmond Ricketts, Miami University's Government Department, has been of invaluable assistance. The contributions of Bro. Norbert C. Brockman, SM, University of Dayton's Political Science Department, have substantially aided this project. Finally, Prof. Lyndon E. Abbott, University of Dayton's Political Science Department, deserves grateful acknowledgement for his direction and advice during the study.

I RESULTS OF THE QUESTIONNAIRE TO THE GOVERNMENTAL UNITS

The results of the 43 questionnaires returned by the respondents are summarized in two tables. Table I depicts the overall responses by type of governmental jurisdiction to the four permitted responses, and shows the degree of interest and need. Table II tabulates the response to each of 25 specific services by type of agency. The remainder of this section explains the findings from each of these analyses. The replies from townships have been disregarded because of their small number (two).

Governmental Units' Forecast of Bureau Use

Table I, entitled Projected Use of Bureau, by Type of Unit, summarizes the replies of all units and agencies to all services listed. The replies marking a service as either in need of improvement or a possible future need were considered "affirmative" reactions. Slightly more than half (52%) of the 1204 responses were affirmative (43 respondents to 28 items). Cities, school districts, and special districts as types of jurisdictions were all 53% or above. Where the reply stated that the present services are adequate or there is no anticipated need, the response was considered "negative".

Table I
PROJECTED USE OF BUREAU BY TYPE OF UNIT

	County	City	Village	School District	Special District
Affirmative	37%	58%	47%	61%	53%
(Need for improvement)	(10)	(25)	(18)	(29)	(9)
(Possible future need)	(27)	(33)	(29)	(32)	(45)
Negative	63%	42%	53%	39%	47%
(Results adequate)	(30)	(29)	(17)	(13)	(5)
(No anticipated need)	(33)	(13)	(36)	(26)	(42)
<u>Total</u>	100%	100%	100%	100%	100%

The following paragraphs will explain for each of the five types of governmental jurisdictions the areas in which affirmative responses prevailed.

Counties. Whereas the answers from the counties were more negative (63%) than affirmative, there were four services which the majority of the five counties considered to be either in need of improvement or anticipated a future need. These services were: (1) a newsletter incorporating (a) Attorney General opinions and (b) proposals and actions of jurisdictions affecting related units; (2) annual reports of pay scale changes and fringe benefits of local unit employees; (3) annual summary of local government finance; and (4) planning for annexation. Darke, Champaign, and Montgomery were the counties which expressed a desire for these services.

Cities. The trend among the cities in considering the establishment of a research bureau was encouraging. Fifty-five percent of the answers from the cities mentioned either that a service was in need of improvement or would be needed in the future. The items that most often were marked by the cities were the following: (1) a newsletter with proposals and actions of local jurisdictions; (2) query service to survey work units in solving common problems; (3) a regional bank of socio-economic data; (4) a computer service on either a standby basis or for recurring and periodic services; and (5) development and assistance in classification and pay plans. The cities demonstrated the greatest amount of interest in the services which the questionnaire mentioned. The following cities considered the bureau as a resource: Dayton, Eaton, Fairborn, Greenville, Hamilton, Kettering, Miamisburg, Oakwood, Springfield, Troy, Urbana, Vandalia, Wilmington, and Xenia.

Villages. The answers from the villages were about evenly split with regard to the need for the bureau. Forty-seven percent of the responses were positive in either stating that a need existed now or might at some future time. In particular, the following items were most frequently mentioned: (1) a newsletter with (a) Attorney General opinions, (b) proposals and actions of local units; (2) access to regional bank of socio-economic information; (3) assistance in developing accounting, filing, and budget systems; (4) revision of pay and personnel rules and procedures; (5) studies in organizational practices; and (6) planning for annexation. The villages which mentioned an interest in the services were: Centerville, Clayton, Covington, Enon, Germantown, Oxford, Seven Mile, and West Milton.

School Districts, Special Districts, Quasi-Public Agencies. Fifty-five of the answers from the school districts mentioned that the items in the questionnaire could be used by the districts either presently or at some future time. The indications from the special districts and from the quasi-public agencies tended toward acknowledging the need for such services; fifty-three of the responses showed such indications. The items which these groups emphasized were: (1) a newsletter with (a) innovative policies and programs of local units, (b) federal legislation and program developments; (2) a query service for solving specific problems; (3) access to regional bank of socio-economic data; and (4) planning for annexation. The school districts that indicated interest in these services were: Hamilton City School District, Montgomery County Board of Education, Brookville School District, Mechanicsburg Exempted Village School District, and Bradford Exempted Village School District. The special districts and agencies which expressed positive interest in the services were: The Dayton Metropolitan Housing Authority; Community Research, Incorporated; Miami

Conservancy District; the Miami Valley Council of Governments; the Miami Valley Regional Planning Commission; and the Troy City Health District.

Demand for Individual Services

Table II provides detail of the services which the respondents indicated they need currently or in the foreseeable future. The tabulation breaks this information down by county, city, village, school district, and special district (including quasi-public agencies). Twenty-five services are listed; three other services (namely access to model ordinances, directory of officials, and annual population estimates) received no affirmative checks.

As seen in Table II there are eight services marked with asterisks to distinguish them as having interested a majority of the respondent jurisdictions. The cities constituted the core of support for these services. The services to which the bureau could give particular attention are:

- communication of the proposals and actions of local units which affect related units (25 positive responses)
- query service for surveying the work of units in solving specific problems (26)
- access to a regional bank of socio-economic data (23)
- development and revision of classification and personnel plans and procedures and pay plans (20)
- planning for annexation (29)
- opinion research (22).

Table II
SERVICES NEEDED, BY TYPE OF JURISDICTION

Service	County	City	Village	School District	Special District	Total
Reference library	1	9	3	3	4	20
Newsletter						
(a) Attorney General opinion	3	3	5	4	3	18
(b) Innovative policies	2	7	5	5	4	23
(c) Federal policies	1	3	5	6	5	23
(d) Proposals and actions of local units	3	8	7	4	3	25 *
Directory of Federal-State financial assistance	2	6	5	4	2	19
Washington representative	1	10	4	4		19
Reports of pay scale changes and fringe benefits	3	9	4	5	2	23
Local government finance	3	8	4	5	3	23
Query service	2	9	6	5	4	26 *
Recruitment service		8	5	4	2	19
Socio-economic data bank	2	11	6	5	4	28 *
Computer service						
(a) Stand-by basis	2	11	3	5	1	22 *
(b) Periodic basis	2	11	4	5	1	23 *
Assistance in recruiting	1	8	4	3	1	17
Collective bargaining		9	3	6	1	19
Revision of pay plans and personnel practices	2	10	5	5	1	23 *
Assistance in accounting, filing systems	2	7	5	5	1	20
Tax structure and finance administration studies	2	8	6	7		23
Utility rate analyses	2	8	4	4	4	22
Opinion research	2	9	2	8	1	22 *
Studies in organization	2	7	5	6	1	21
Annexation planning	3	9	7	6	4	29 *

* Majority of respondents

Two observations about Table II are in order. First, a statistical tabulation of the type presented does not indicate the relative value or priority among the various services to the respective units and agencies. Second, the facilities of a bureau might well be in greater demand as the local governmental units become familiar with the potential benefits and as governmental operations grow in volume and complexity.

II RESULTS OF THE CONSORTIUM QUESTIONNAIRE

A questionnaire was sent to ten Consortium institutions to inventory the various departments which might be interested in providing staff for the proposed bureau. Table III presents the findings of this inventory, as based on the responses of forty departments of nine schools.

Table III
AVAILABLE CONSORTIUM PERSONNEL, BY DEPARTMENTS

<u>Departments</u> <u>Name</u>	<u>Number</u>	<u>Faculty</u>	<u>Full-time majors</u>		<u>Operating Coop'tive or Intern Programs</u>
			<u>Undergraduates</u>	<u>Graduates</u>	
Accounting	2	11	500		1
Business	7	46	2550		2
Communication Arts	1	12	200		1
Computer Sci.	2	5	180		
Cooperative l'd.	2	4	350		2
Economics	3	19	260		1
Education	5	19	2500		1
Industrial Eng.	2	5	140		2
Information Sci.	1	1		37	
Political Sci.	7	25	700	10	3
Psychology	3	7	170		
Sociology	5	25	620		1
Totals	40	179	8170	47	14

The distribution of departments according to schools is:

Cedarville College	1
Central State University	4
Sinclair College	3
University of Dayton	10
Urbana College	2
Wilberforce University	5
Wilmington College	5
Wittenberg University	7
Wright State University	3

The data show that the number of graduate students does not currently appear to provide an adequate source of personnel. As the schools expand and develop graduate programs, this shortage will be alleviated. Initially, the employment of graduate students will be limited to the fields of information science and political science.

One important factor which cannot be adequately measured by statistics is the degree of cooperation and interest on the part of the departments which will be exhibited in this inter-institutional and interdisciplinary endeavor. Certainly the initial period of the bureau's existence will deal with the development of cooperative efforts. Such potential problems as determining project supervisors and choosing methodology will have to be clarified by general guidelines.

A key factor which will contribute to the proper utilization of these potential resources is the ability to capitalize on the interest and ability of the individual members of the disciplines -- in particular this will be true in the area of faculty participation. The job should fit the person and provide suitable opportunity for developing his initiative. This depends on an accurate understanding of the personnel who would participate in the research bureau. The bureau should attempt to implement a system for matching individual faculty members with specific area needs of the governments.

Problems associated with relating the bureau to the Consortium institutions will occur in the areas of credits, pay for the staff, supervision, grading, and scheduling. The difficulty with crediting is the determination of the academic credit to be awarded students for participating in a project under the auspices of the bureau. The solution may be found either by having a fixed ratio of hours to credit points that would be a general policy, or by having each department determine its own policy with regard to students from its own personnel.

The pay that the staff will receive for the projects, whether faculty or student body, would be determined by the contract arrangements drawn up by the bureau's director. Each school or department may set up their individual minimum standards, which the bureau would have to keep in mind when choosing personnel.

The departments retain the right to award the grade, where the work is being done for credit. The bureau and the supervisor will not have the responsibility for determining the grades of the staff.

The scheduling of operations will be complicated somewhat by the varying lengths of semesters in the Consortium institutions. The difficulty would mainly be in the appointment of faculty members, who will be unable to carry a full teaching load while staffing a project for the bureau. The termination of projects should be co-terminous with the semesters of the school.

III RECOMMENDATIONS

The Concept of University - Government Relations

For their mutual benefit, the civic community and the academic institutions should be characterized by a cooperative relationship. Harold Howe II, United States Commissioner of Education, has called for the disappearance of the fences that separate the two spheres. He suggested in August, 1967, that the universities should plan for community involvement. Furthermore,

the American university cannot be a withdrawn, uninvolved, intellectual enclave We must take the best minds in our institutions and turn them loose on the complex of urban problems -- housing, law enforcement, transportation, air pollution, water pollution, rats, jobs and job training and retraining.¹

In the Miami Valley, local governments have recognized the existence of these and other problems. The task of a research bureau would be to bridge the gap between the governmental needs and the resources of the educational institutions. Both types exist to serve society; one to serve the present community and the other to prepare citizens for the future. The role of education includes providing academic assets to individuals who will become responsible for managing the political system and institutions. As John W. Gardner, former Secretary of Health, Education, and Welfare, has written in Goals for America:

Education is important in any modern society, whatever its political or economic forms Education is essential not only to individual fulfillment but to the vitality of our national life. The vigor of our free institutions depends upon educated men and women at every level of the society The great basic goals of our educational system [are] to foster individual fulfillment and to nurture the free, rational, and responsible men and women without whom our kind of society cannot endure.²

¹As quoted in Thurston Davis' "The University in the City," Catholic Mind, Vol. 66, No. 2 (June, 1968).

²The American Assembly, Report of the President's Commission on National Goals, Prentice Hall, 1960, pp 81 and 100.

To accomplish this goal, the university has to extend itself beyond the classroom mode of instruction, or even the occasional contributions of individual professors to the civic community. The latter have been positive steps toward reconciling the two spheres; but the formal organizing of these contributions would enhance their value, both to the university and to the governments.

The governmental units draw upon all available and competent resources to provide their citizens with the most complete services. As recommended in the Committee for Economic Development's July, 1966 report entitled Modernizing Local Government:

...local communities, and especially all metropolitan areas, undertake vigorous privately financed research -- either by contract or through permanent local bureaus of research -- to develop plans for performing local functions more effectively.³

The universities are one such source. The premise and approach of this study is that the relationship should be formalized by a joint sponsorship of a research bureau by the Consortium and an appropriate agency representing the governments. The resulting partnership would link the untapped resources with specific problems confronting local legislative and administrative agencies.

The effort to establish a communications and assistance bridge between public agencies and academia on a systematic and organized basis will be in the nature of a risk. The assumption stated above (i.e., the Miami Valley governments have needs that can be serviced by resources existing within the educational sphere) justifies taking the gamble in order to realize the benefits that will accrue, if the resources and needs can be related more profitably and effectively than previously. As expressed in the 1967 Annual Report of the Twentieth Century Fund:

There is an inherent risk in taking the next steps on the intellectual landscape where there are no roads and few trails to be guided by. The risks can be minimized, however, by establishing reasonable objectives and by engaging in thorough reconnaissance.⁴

³P. 57

⁴P. 12

The risks in this particular endeavor may be manifested in:

- (a) the failure of the academic community to respond adequately,
- (b) the reluctance of governmental units to employ the assistance of the bureau,
and,
- (c) the possibility that the proposed mechanics will be inadequate to serve as the
connecting link.

The existence of these multiple risks compounds the gamble. However, the surfacing of unifying elements, signifying the attitudes of increasing reliance on cooperative measures, offsets some degree of the gamble.

The Dayton - Miami Valley Consortium provides an example of this spirit among the colleges and universities. The Miami Valley Council of Governments performs a similar function among the governments. The potential effect of both organizations in their respective areas of influence may be great. Similar organizations exist in the fields of planning, health, and welfare (Miami Valley Regional Planning Commission, the Hospital Planning Council, and the Health and Welfare Planning Council). In a sense, then, a research bureau, as envisaged in this report, is a further progression of existing arrangements which attack the problem of fragmentation. Whereas joint efforts frequently occur within a single functional area (e.g., education, planning) this bureau would be unique in its attempt to create a bond between dissimilar areas.

Matching Needs with Resources

The findings of the questionnaire, as presented in Chapters I and II, serve as a basis for some immediate judgements concerning the feasibility of a bureau. Since the findings are not necessarily as thorough a reconnaissance as advocated by the Twentieth Century Fund, these preliminary data, which can be expanded by further inquiry, provide indications of what objectives the bureau could center on during its initial stage.

The findings suggest eight specific services that are needed by a majority of the governments which responded to the questionnaire. These may collectively provide the foundation for some type of instrument to secure university-local government collaboration. The ability of the universities to apply their potential resources to the problems of the local governments is closely related to the issue of staffing the operations.

Considering how few full-time graduate students are now enrolled in the surveyed departments, the bureau can rely but little upon this segment of the institutions to satisfy the staffing requirements.

The nature of the bureau's operations will demand a degree of competency and sophistication beyond that of the ordinary undergraduate. Therefore, reliance upon undergraduates will be limited to those who demonstrate the necessary qualifications of interest and ability. What may be an important factor in this consideration of the advisability of using undergraduates within the framework of the bureau is the possibility of incorporating innovative instructional modes into the educational institutions. The bureau may be the instrument for introducing the "laboratory" type of course into the curriculum, i. e., on-the-job activities which would be a means for relating the theory to actual problem-solving situations.

This approach of incorporating undergraduates into the bureau's work can be developed either as a mode of independent study-research or in conjunction with selected seminars. The query service demonstrates how this might operate: the surveying of local government programs could be staffed by competent undergraduates, under the supervision of a faculty member. So too with the regional bank of socio-economic data; the collection of the data could be accomplished by a team of undergraduates.

An important by-product of such an operation would be the re-enforcing of a lateral relationship of student with professor in a work situation. The problem-solving context of the learning process would result in a spirit of participation and knowledge sharing, which the classroom environment impedes to a certain extent.

What should be stressed is that the success of the bureau will depend on the leadership and cooperation of participating faculty members of the various Consortium institutions who will constitute the nucleus of the bureau's staff. The selection of graduate or undergraduate help and the determination of the nature and extent of their participation would rest with the faculty.

In addition to the involvement of faculty members, professional and administrative supervisors in the governmental units might also participate in the general direction and daily supervision of students assigned to projects. Each situation would be planned for the best combination of talent and time, with the degree of activity among the participants varying according to the circumstance.

Alternative Forms for the Research Bureau

Three organizational formats constitute the alternatives available for the establishment of a research bureau. These are:

- (a) an agency for holding funds to be allocated to faculty members for individual projects,
- (b) a research bureau co-sponsored by the Consortium and a similar agency representing the governments, and
- (c) a fully staffed service contract research bureau.

The first alternative would establish an agent to be responsible for receiving and disbursing money to fund research opportunities that individual faculty members may

be involved in. This agency would not actively solicit projects nor have a full-time professional director. It would restrict its functions to supporting academic studies and research that stress areas which would advance the frontiers of knowledge. A major advantage of this arrangement is the possibility of its expansion into a more active bureau, should the Consortium decide to take this step.

The second organizational type calls for a research bureau under the joint sponsorship of the Consortium and an agency representing the governments of the region. Support from the local governments seems more probable for this bureau than for the first one considered, and the possibility for federal support would also be greatly enhanced. This type of organization goes beyond the merely academic approach and enters into the practical field of problem solving. As described in the previous section, the climate in the region seems suited to the implementation of the bureau. While substantial financial commitments would be necessary in establishing and running this bureau, it has a high potential for achieving a permanent, productive status. The uniqueness of this form is the dual sponsorship of the Consortium and a governmental affiliate.

The third format would be considerably more costly than either of the two preceding ones. By a fully staffed bureau is meant an organization with a director, one or two professional assistants, a clerk-statistician, and a secretary. The budget would run between \$60,000 and \$70,000 a year. Clearly this sum cannot be expected from academic sources and service contracts would certainly not be sufficient during the initial years. Hence, extensive subsidation from Consortium budget or federal aid programs, if available, would be required. The risk of failure would be disproportionately high in comparison to the contribution and success anticipated.

Establishment of a Co-Sponsored Bureau

Of the three formats considered above, the second is thought to be the most feasible and best suited to the Miami Valley. The recommendation, then, is to develop a plan whereby the Consortium and an existing agency representing local governments would co-sponsor a bureau. Of the available agencies, the one that appears most practicable is the Miami Valley Council of Governments. The Miami Valley Council of Governments, the first one to be established in Ohio under enabling legislation passed by the 107th Ohio General Assembly, is a voluntary association of local governments in the five county area of Darke, Greene, Miami, Montgomery, and Preble Counties. Its basic membership is open to counties, municipalities, and school districts. Townships, special districts, and quasi-public agencies may join as associate or affiliate members. Its purposes include to (1) serve as a forum for discussion of common problems; (2) provide machinery for communication and coordination among governmental agencies; (3) collect and exchange information; and (4) operate as a vehicle through which common services can be provided more efficiently and effectively. Financed by assessments paid by members plus foundation support during its formative period, the Council of Governments is potentially an agency that will strengthen local government through joint efforts in a variety of fields.

The value of this arrangement centers on its inherent merits as a vehicle or mechanism for accomplishing the desired relationship between academic and governmental institutions. The very bureau itself would be a manifestation of effective rapport. The involvement of the Consortium would enhance the educators' awareness of their obligations and opportunities for supplying services to local governments. The mutual support by an agency with close intimate ties to governmental units would sharpen and expand the potential clientele's perception of its needs and relevance to

educational institutions. The combined effort will set the stage for optimal access to Consortium institutions and local governmental units, and thereby provide an institutional base of sustaining closer and more productive ties between suppliers and consumers of services.

Implementation Steps. The procedure for establishing a bureau as just described includes the following steps:

- (1) agreement between the Consortium and the Council of Governments (or another appropriate agency, e.g. Community Research, Incorporated) to co-sponsor a bureau. Matters that would be covered are: purpose, selection of title, administrative arrangements, and deliniation of respective responsibilities,
- (2) application for "seed money" or a grant from a federal program and/or a local foundation to provide support during the first three to five years, or until service contracts would supply the bulk of resources,
- (3) appointment of a director or coordinator, whose duties would be carefully formulated,
- (4) initiation of work program, including
 - (a) further clarification and identification of clientele needs, and
 - (b) more precise determination of the resources of educational institutions.

By the end of the first year of operation, the lines of communication among the participating agencies should be firmly established and operating effectively; the role and operational tasks of the bureau should be reasonably clarified; and the modus operandi of the bureau should be accepted. With this as a basis, the second year of operation would move forward in supplying more of the desired services.

Staffing. One of the principal questions will be the matter of qualifications for the director, his compensation, and the hiring policy. Several alternatives present themselves:

Full-time director who has no institutional affiliation. In short, he would be full time, with no teaching or other responsibilities.

Part-time director, who works for the bureau a specified proportion of his time, being paid from bureau budget, and the remainder of his time on other gainful employment (such as teaching, college administration, or governmental administration).

Director who is on leave or loan from a regularly tenured position. In this instance, he would be on a year's leave from an institution, with his salary being paid by the bureau, but with the understanding that he would resume his regular job at some time. The other variety of this arrangement would be a loan of a person for full- or part-time in which the institution paid his salary. In short, this would be a subsidy from one of the schools or agencies.

Considering all of the above possibilities, it is recommended that the position be a full-time one since the combination of tasks normally results in the neglect of one or the other. Assuming that a loan by an institution or agency is not likely to occur, the choice then lies in either a leave of absence arrangement, or outright employment of a person with no employment ties elsewhere.

Qualifications for the director under any of these plans would not differ substantially. They should be formulated by a committee to be discussed later.

One question which remains is the status of faculty who participate. Only infrequently would they be employees of the bureau, and hence would retain status as

full-time faculty with their employing institutions. When this is the case, two possible arrangements could be used in compensating them. First, this could be entirely an intra-institutional affair, with the faculty member receiving his regular pay from the college and his teaching or other duties adjusted to allow him time to direct a project under the auspices of the bureau. The second possibility is for the bureau to reimburse the college for the time of the faculty member, the funds coming either from service contracts or "seed money." The other situation contemplated would be a "direct hire" by the bureau of a faculty member for a set period of time (i. e. , a term or a semester).

Under the recommended arrangement or plan, the remaining staff would consist of one secretary whose duties include typing, clerical work, and general office functions.

Budget. A proposed budget for the bureau is presented below. It is based on the premise that for the first year, the principal expenses are for salaries paid directly by the bureau. Adequate reimbursement for transportation must be provided and a small amount is included for expenses in performing studies and research.

<u>Item</u>	<u>Amount</u>
Salaries	
Director	\$ 16,000
Secretary	6,040
Fringe benefits (15%)	3,330
Travel (12,000 miles per year @ 10¢ per mile plus \$300 for professional meetings)	1,500
Assistance for staff studies	225500
Office space (if not donated)	1,200
Furniture and equipment (one time)	1,000
Supplies, Telephone, etc.	600
Contingency	400
Total	<hr/> \$ 32,000

During the first year, it is assumed that the demands on the bureau service would not involve much direct outlay by the bureau for either faculty or graduate compensation. Such expenditures are included in "assistance for staff studies." One unknown is the demand for a library or reference service; if this materializes, then additional outlay would be needed for materials, shelf and file equipment, and a part-time custodian of the reference materials.

Co-Sponsor Joint Committee. As mentioned earlier, the administrative arrangements would be worked out in detail between the Consortium and the Council of Governments. Undoubtedly, each would appoint persons to represent it on a joint ad hoc committee whose function would be to formulate the agreement. This report recommends that such a committee give serious thought to establishing a permanent joint coordinating committee, to serve as an integrating device in this co-sponsored effort. It could be composed of an equal number of members from both groups, and select its own chairman. Its functions would include selecting a director, subject to ratification by the Consortium and the Council of Governments, approving the inauguration of a new basic service, formulating overall policy, and serving as liaison between the bureau and its constituent groups.

IV PROVISIONS FOR FUNDING

A long range concept of the bureau envisages a self-supporting operation in which the governmental units would provide the bulk of the money on a service contract basis, with the universities responding with competent, adequate personnel. It is also recognized that this situation is unlikely to occur soon since the demands of governmental units are not fully identified, nor their reliance upon a bureau. Consequently, the recommended plan requires some form of a subsidy, from either government sources or foundations.

Federal Government Support

Six possible programs exist through which federal funds may be obtained for the operation of the bureau. The authorization of the required allocations fall into two general classifications: either as an educational endeavor or as an urban program. The following are capsule descriptions under which the bureau could receive assistance from the federal government.

Higher Education Act. The purpose of the Higher Education Act of 1965 as stated in Title I is to strengthen community service programs of colleges and universities by assisting in the solution of community problems such as housing, poverty, employment, transportation, and the area of government. A "community service program" means an educational program, activity, or service including a research program and a university extension or continuing education program. Community problems may be divided into these categories: community development, education, health, welfare, human resources, physical resources, communication, and government. A further breakdown of the government's as follows: (a) government and community affairs; (b) improvements in local government administration; (c) education for government officials; (d) metropolitan and intergovernmental affairs; and (e) public and community affairs management.

Two factors which aid in determining whether or not a program meets the specifications for allocations of funds are: the proposed programs, services, and activities are not available; and the conduct of the program or performance of the activity or service is consistent with the institution's overall educational program and is of such a nature as to be appropriate for the effective utilization of the resources and competencies of its faculty. Funds can be allocated only for the administration of the programs and not for the material development of the program.

The operation of this program in Ohio is administered by the State Board of Regents on a matching basis of fifty - fifty. Since many proposals are submitted, usually those activities which deal with immediate results in the area of community problem solving have a priority over research orientated programs or projects.

Cooperative Research Act. The Cooperative Act of 1954 (P. L. 83-531) sets up a program to administer support to research projects which are quite varied but in some manner related to the questions that educators seek to answer. Practical and innovative approaches are welcome at all levels of education. Especially sought after are programs in the field of adult education. There needs to be evidence that the research must eventually have value for the educational process.

The demonstration of new educational techniques at any level, as well as provision for study and training possibilities for teachers and administrators, is embraced within the scope of this program. Consortium research development receives special mention as a priority item.

Pilot and exploratory studies and provisions to enable faculty and students to study, plan, and conduct research as an integral experience in their discipline is acceptable. The possibility of applying for allocations to the Research Bureau as an innovative technique on the Consortium level of higher education might be pursued.

In 1966, the Cooperative Research Program was authorized to administer seventy million dollars; allocations were made to public and non-profit private institutions, agencies, and to individuals on a grant or contract basis. Besides the 1954 Cooperative Research Act, this program is based on the National Defense Education Act of 1958 and on the Elementary and Secondary Act of 1965, Title IV.

Housing and Urban Development Act. The orientation of the Housing and Urban Development Act (89-117, Sec. 703) is to specific projects which attempt to develop facilities for recreational, health, and social services and activities. The act stresses the involvement and participation of colleges and universities by calling for them to offer local governmental officials and private agencies additional tolls for the revitalization of the community. The focus of this assistance is on the development costs for neighborhood facilities needed to carry out the services required in that community.

Housing Act. The purpose of the 1964 Housing Act as stated in Title VIII, (P. L. 88-560), is to assist and encourage the states in cooperation with the colleges and universities and urban centers to organize, initiate and expand programs which will provide special training in skills needed for economic and efficient community development to those technical and professional people who are, or are training to be, employed by a governmental body which has responsibilities for community development. Also, it provides for the support of state and local research that is needed in connection with housing programs and needs, community development programs, collecting, collating, and publishing statistics and information relating to such research. This would be carried out on a fifty-fifty match basis.

The same act provides the Urban Studies Fellowship Program (Sec. 801), which is affiliated with the Housing and Urban Development's City Planning and Urban Studies.

Program. This program attempts to fill the need for trained urban generalists and specialists by encouraging and aiding graduate students in the field of city planning and urban housing. The awards are made to increase the numbers in already existing programs of universities.. The University of Dayton is currently making application as a recognized institution whose graduate students would be able to meet the requirements and be awarded these fellowships.

Economic Opportunity Act. Within the scope of the Community Action Program of the Economic Opportunity Act, Title II, (P. L. 88-452), the director is authorized to conduct, or to make grants to enter into contracts with institutions of higher education for the conduct of research, training, and demonstrations pertaining to the purposes of Community Action. He may also arrange for the training of specialized personnel needed to develop, conduct, administer community action programs or to provide services of other assistance. The Community Action Program is geared to bring about the elimination of either community poverty or the underlying causes. The possibility of individual projects of the bureau being funded under this program is promising.

National Science Foundation. The National Science Foundation's Undergraduate Research Program orientated toward independent research for those interested in careers in science. The scientific investigation stresses the individualized experiences; the project should be comparable in intensity and level of sophistication to graduate study. The fields of research and study should be subject to the accepted canons of objectivity, verification, and generality. Application to a solution of a challenging and significant problem should also be a characteristic of the program. The fields of engineering and the social sciences are included in this program.

The Undergraduate Research Program is open to four year colleges and universities and non-profit private institutions for an extended period of three years; it will accept at the most six participants from any one institution. The research will be done on either a full-time (forty hours per week) or on a part-time (ten hours per week) basis. Those institutions which wish to use this mechanism as an experiment for determining whether it should become a part of the normal curriculum are acceptable. Also, active research groups which seek to combine undergraduate education with ongoing research will be favorably reviewed.

Foundation Support

Foundations are another possible source of funds. Local foundations might be willing to aid in the establishment of a bureau. Foundations, which previously were orientated toward educational endeavors, and are now showing greater interest in the connection of education to the civic communities, might especially be interested in promoting the bureau.

One suggestion for approaching the foundations was provided by Mr. David Ruhmkorff of the Consortium of Higher Education Religion Studies. A one year grant should be requested; this could be followed by a three year administrative grant to pay off the initial expenses and for one or two services. As other projects are begun, matching grants might be acquired. This appears to be suited to the needs of the bureau.

An alternative approach that might be used after the first year would be funding of individual projects. This might have considerable appeal for innovative projects.

V BUREAU RELATIONS WITH RESEARCH AGENCIES

The bureau's relationship with the academic community and with governmental units has been explored. There remains consideration of the bureau's relation to planning and research agencies in the area. This relationship was discussed individually with parsons from the Miami Valley Regional Planning Commission, Community Research, Incorporated, and the Miami Valley Council of Governments. The general sentiment was one of encouragement for the establishment of the research bureau.

Mr. Dale Bertsch of the Miami Valley Regional Planning Commission reacted positively to the idea of the Consortium initiating the bureau. Also, he showed interest in the possibility of sharing and pooling facilities and equipment. He foresaw no necessary conflicts between the Planning Commission and the bureau, provided communications between the two groups were established and continued. The obtaining of a federal grant seemed plausible to him.

Dr. Jeptha Carrell of Community Research, Incorporated, stated that the amount of work available for research agencies in the area was substantial and can support another agency, such as the Consortium's research bureau. The possibility of conflict among the agencies was minimal. He considered the academic orientation of the bureau as its distinguishing characteristic.

He made two suggestions concerning the programs of the bureau: (1) plan and implement an evaluation program for federally financed operations; and (2) provide research facilities and personnel for boards of education to organize and operate research programs. Both of these suggestions would be in the areas where innovation could be incorporated into the work. Also, both are of a continuing nature and could provide an adequate foundation on which the bureau could develop.

The Miami Valley Council of Governments conducted their own survey, covering many of the same points of this study, to gain knowledge of the needs of the local units. In a discussion with Mr. Edward Rausch, chairman of the Work Study Committee, he dismissed the necessity of conflicts developing so long as lines of communications between the two agencies were maintained.

Two recent developments in the Miami Valley are of significance in respect to opportunities for advancing research efforts. The Miami Valley Project, a long-range study of ecology of the Greater Miami Valley, offers a means for relating the bureau to still more comprehensive and interdisciplinary efforts in the region. Financed by National Science Foundation funds and centered for administrative purposes on the University of Cincinnati campus, this project is innovative and suggestive of the many possibilities that lie dormant. One specific idea mentioned by Dr. Mitchell Zvon, Executive Coordinator of the project, is to employ for one day a week a person to be a catalyst and initiator in specific areas, such as government. If this idea is implemented, perhaps the bureau director could serve in this capacity, thereby drawing some financial support from the Miami Valley Project.

Another development pertinent to this report is the proposal for urban observatories which are conceived as a "network based on a partnership between universities and municipal governments."⁵ Dr. Armstrong, President of the Consortium, has observed that the bureau could serve as the vehicle for operation of an urban observatory, were such a project initiated in this region.

⁵Governing Urban Society: New Scientific Approaches, Annals of the American Academy of Political and Social Science, May, 1967.

VI SUMMARY

An extensive but preliminary survey of the feasibility of a joint government research bureau in the Miami Valley has been made. Such a bureau, properly organized and adequately funded, would serve a vital purpose in the Miami Valley by providing an instrumentality for effecting closer and productive collaboration between the institutions of higher education and the local government units. A bureau co-sponsored by the Consortium and the Miami Valley Council of Governments, financed by federal and/or foundation money, is recommended to match needs with resources. The bureau, in the setting of the area serviced, could innovate methods and programs beneficial to both the educational institutions and the governmental units.

APPENDIX A

31

UNIVERSITY OF DAYTON
DAYTON, OHIO 45430

Department of Political Science

March 29, 1968

Dear Sir:

The Dayton-Miami Valley Consortium of Colleges and Universities is sponsoring a feasibility study concerning the establishment of a Joint Government Research Bureau. The Consortium is an agency recently formed by the eleven colleges in the area for the purpose of coordinating higher educational efforts and services. We are seeking information about the needs of local governments and other public agencies that would be served by such a bureau. Your cooperation in answering the enclosed questionnaire will be necessary in making this a successful study.

The questionnaire is divided into two parts. Part A is an illustrative listing of services that the Research Bureau might possibly render. Part B asks for information concerning services obtained from consultative agencies in the past three years.

The study is being conducted by the Department of Political Science of the University of Dayton. I plan to visit your agency in the near future to assist in completing the questionnaire. Please complete Part B prior to my visit. Part A can also be answered before my appointment, if you so desire. I will telephone your office within the next few days to arrange for the interview. At that time, I will be glad to explain in more detail the purposes of the proposed Research Bureau.

Yours truly,

Richard T. Conboy

- 1. Access to regional bank of socio-economic data useful for planning and program evaluation**

m. Computer services:

1. On a standby basis with annual fee affording units of service in programming and processing time
2. For recurring or periodic services

n. Other:

II. Project Services -- clearly delineated and limited timed research

- a. Assistance in recruiting for key vacancies
- b. Assistance in collective bargaining
- c. Development and revision of classification and pay plans and personnel procedures and rules
- d. Design and assistance in the installation of accounting, budgeting and filing systems
- e. Preparation of bond prospectuses
- f. Tax structure and finance administration studies
- g. Utility rate analyses and studies
- h. School censuses
- i. Opinion research and surveys
- j. Studies in organizational and administrative practices
- k. Planning for annexation
- l. Others

[illegible]

GOVERNMENT RESEARCH BUREAU REASIBILITY STUDY

PART B

Have you used research or consultative agencies in the past three years, other than in the fields of law, medicine, engineering and architecture? If you have, please fill the following questionnaire out:

Name of service organization	Description of project	Date	Approximate cost	Form in which findings were made	Do you foresee a need to repeat this service?

APPENDIX B

DAYTON - MIAMI VALLEY CONSORTIUM
300 College Park Avenue
Dayton, Ohio 45409

The President

March 25, 1968

Memorandum

To: Consortium Research and Development Officers
From: Charles J. Armstrong
Subject: Enclosed Questionnaire

The Dayton - Miami Valley Consortium is sponsoring a feasibility study of a Joint Government Research Bureau. The major segments of the study are first, identification of the needs of the local governing units and, second, an inventory of the resources of the Consortium colleges and universities. This letter concerns the latter.

The bureau may offer such services as conducting surveys and studies (e.g., personnel, accounting systems, annexation, opinion polls), maintaining a research library, and providing computer time. The purposes for offering these services are to provide facilities to local governing units for contract research experiences in public services. The bureau may also constitute a base for cooperative programs which are now in the discussion stage. An interdisciplinary approach to problem-solving would be developed.

Since the proposed bureau has been envisaged as a student-faculty staffed operation, your assistance is required to provide data which indicate the possible resources available. We ask you to fill out the accompanying questionnaire and return it to this office by April 17, 1968. The answers will not be considered as a commitment to participate in the program if it is started.

It is recognized that administrative adjustments may be involved in the programs that develop. Questions of scheduling, credit, and similar matters will be considered at a later stage of this study.

Thank you for your assistance in this project.

(Signed) Charles J. Armstrong

Encl.

GOVERNMENT RESEARCH BUREAU FEASIBILITY STUDY

(Representative to DRAVC)		(College)		(Date)	
Department	Chairman	Number of Full-time Faculty	Number of full-time majors Undergraduates Graduates	Do you now have Co-op Intern Programs Programs	Are you interested in beginning a Co-op or Intern Program ?
Accounting					
Business Administration					
Business Education					
Geography					
Economics					
Education					
Industrial and Technical Ed.					
American Studies (Interdisciplinary)					
Political Science					
Psychology					
Social Welfare					
Sociology					

Ref. Pages 21 and 32

THE PRESIDENT



DAYTON MIAMI VALLEY CONSORTIUM

300 College Park Avenue • Dayton, Ohio 45409, Phone 513-224-1204

April, 1969

To: All Faculty Members, DMVC Institutions
From: Charles J. Armstrong, President, DMVC
Subject: Faculty Data Bank

One of the most important projects undertaken by the Consortium is the development of a Faculty Data Bank, which will be computerized for storage and ready retrieval.

The information will be invaluable in preparing for particular Consortium studies and in locating special abilities. Such a bank could become a great community resource of competence, and for those faculty members interested, an excellent means of making available their special interests and talents.

We seek your cooperation and indulgence in completing, as fully as possible, the enclosed questionnaire. We apologize for its length, but all of the information is necessary for an adequate data bank.

Please note that all of the information you provide will be treated as confidential, and released only with your permission.

If you have questions, please call me at 224-1204.

CJA/ms
Enclosure
cc: Presidents, DMVC Institutions

INSTITUTIONAL MEMBERS

Air Force Institute of Technology
Dayton, Ohio 45433

Antioch College
Yellow Springs, Ohio 45387

Cedarville College
Cedarville, Ohio 45314

Central State University
Wilberforce, Ohio 45384

University of Dayton
Dayton, Ohio 45409

Sinclair Community College
Dayton, Ohio 45402

Urbana College
Urbana, Ohio 43078

Wilberforce University
Wilberforce, Ohio 45384

Wilmington College
Wilmington, Ohio 45177

Wittenberg University
Springfield, Ohio 45501

Wright State University
Dayton, Ohio 45431

ASSOCIATE MEMBERS

Cox Heart Institute
Kettering, Ohio 45429

Engineering Foundation of Dayton
Dayton, Ohio 45402

Frigidaire Division
General Motors Corporation
Dayton, Ohio 45402

International Business Machines Corporation
Dayton, Ohio 45402

McCall Information Services Company
Dayton, Ohio 45409

Monsanto Research Corporation
Dayton, Ohio 45418

National Cash Register Company
Dayton, Ohio 45409

Ref. Pages 21 and 32

DAYTON-MIAMI VALLEY CONSORTIUM

FACULTY DATA BANK

Please return completed form by May 1, 1969, in the attached envelope to the DMVC Office. Add extra sheets if necessary. NOTE: None of the information which you supply on this form will be released to any agency or individual without your express permission.

Date _____

1. Name _____
Last First Middle

2. Title _____ Institution _____

3. College or Division and Department _____ Office phone _____

4. Home address _____ Home phone _____

5. Education

a. Undergraduate

Institution and location
Major/minor
Degree and date conferred

b. Graduate or Professional

Masters

Institution and location
Field of study
Degree and date conferred
Title of thesis

Doctorate

Institution and location
Field of study
Degree and date conferred
Title of dissertation

c. Postdoctoral and Postgraduate

Institutions and locations
Fields of study
Dates of attendance

d. Professional registrations, licenses, certification

Kinds, areas of practice authorized, and dates

6. Honors

a. Types of award or distinction

b. Awarding institutions or organizations, and dates

7. Travel

a. Foreign countries visited

b. Purpose of each visit

c. Duration of each visit (dates)

8. Professional Experience at Other Institutions (for each appointment)

- a. Institution or organization
- b. Location
- c. Position or rank
- d. Duties performed and dates

9. Professional Identification and Competencies

- a. Primary professional identification
- b. Secondary professional identification
- c. Teaching competencies (current and potential)
- d. Research competencies (current and potential)
- e. Additional institutional activities for which you have competence
- f. Geographic areas of special knowledge and competence
- g. Language attainments
 - Names of languages
 - Degree of proficiency in speaking, reading, writing

10. Membership in Learned and Professional Societies

11. Special Interests, Competencies, Hobbies, etc. (not related to your professional field)

12. Publications and Other Evidence of Creative Achievement (Resulting from application of professional talent)

- a. Completed books (give details)
- b. Published articles (give details)
- c. Works in progress (give details)
- d. Films, recordings, radio & TV programs
- e. Drama productions and concerts
- f. Art exhibitions
- g. Inventions (data on patents)

13. Research Projects and Activities (Please give details -- descriptive title, type, sponsor, funding, duration, discipline, your role, etc.)

14. Consulting Activities (with details)

15. Public Service Activities

- a. Consulting (that which serves the public interest)
- b. Service on government committees
- c. Service on professional community committees
- d. Editing professional journals
- e. Participation in accrediting procedures
- f. Other (e.g. non-professional civic and community activities)

16. Outside Interests

If you are interested in speaking engagements, consulting or research for business and industry, or other forms of civic or community service, please indicate such below:

Ref. Pages 21 and 32

DAYTON-MIAMI VALLEY CONSORTIUM

FACULTY DATA BANK

FACULTY FORM

(1-5)

Date _____

Name _____

Last _____

First
(1:6-25)

Middle Initial _____

In which of the following areas do you spend one third or more of your time:

Administration

(1:29)

Research

(1:30)

Teaching

(1:31)

Please give your

Primary PROFESSIONAL IDENTIFICATION

(If teaching or research, please indicate field. If other, give general area of interest.)

(1:72-75)

Secondary PROFESSIONAL IDENTIFICATION

(see above)

(1:76-79)

Areas of TEACHING COMPETENCE

1) _____

(6-9)

2) _____

(10-13)

3) _____

(14-17)

Areas of RESEARCH COMPETENCE

1) _____

(18-21)

2) _____

(22-25)

3) _____

(26-29)

In what additional institutional activities do you have experience?

(30)

What geographic areas are your specialties?

1) _____

(31-32)

2) _____

(33-34)

3) _____

(35-36)

4) _____

(37-38)

Please list the foreign countries you have visited for more than six weeks.

COUNTRY

PURPOSE OF VISIT

DATES

(1:63-70)

Please list the languages you know and check off the following:

LANGUAGES

ABILITIES

a. _____	(37-38)	(39) Speaking	(40) Reading	(41) Writing
b. _____	(42-43)	(44) Speaking	(45) Reading	(46) Writing
c. _____	(47-48)	(49) Speaking	(50) Reading	(51) Writing
d. _____	(52-53)	(54) Speaking	(55) Reading	(56) Writing
e. _____	(57-58)	(59) Speaking	(60) Reading	(61) Writing

(see other side)

Have you worked with any of the following media? (Please check, if yes.)

(62) Books

(63) Articles

(64) Films, recordings, radio,
or TV programs

(65) Drama productions and concerts

(66) Art exhibitions

(67) Inventions

Please append bibliography, and list of works and inventions.

Have you been or are you now involved in research projects or activities?

 Yes No (68) Please append description with details of projects.

Have you been or are you now involved in consulting for industry or the government?

 Yes No (69) Please append description with details.

Please give brief description of your work in the following areas:

a. Consulting (that which serves the public interest) (70)

b. Service on government committees (71)

c. Service on professional community committees (72)

d. Editing professional journals (73)

e. Participation in accrediting procedures (74)

f. Other (e.g. non-professional civic and community activities) (75)

What are your outside interests, competencies, and hobbies? We are especially interested in those not related to your professional field.

Would you be interested in involvement with any of the following?

(76) Speaking engagements

(77) Consulting work

(78) Community service

(79) Other

Ref. Pages 21 and 32.

DAYTON-MIAMI VALLEY CONSORTIUM
FACULTY DATA BANK
VITA INFORMATION

(1-5)

Name _____
Last First Middle Initial (6-25)

Institution _____ Title _____
(26-27) (28)

School _____ Division or
(if applicable) Department _____
(32-34)

Home address _____

Home phone _____ Office phone _____

UNDERGRADUATE:

Degree _____ Year conferred _____
(35) (36-37)

Major _____ Institution _____
(38-41)

GRADUATE OR PROFESSIONAL:

Degree _____ Year conferred _____
(42) (43-44)

Major _____ Institution _____
(45-48)

Title of thesis _____

Degree _____ Year conferred _____
(49) (50-51)

Major _____ Institution _____
(52-55)

Title of thesis _____

POSTDOCTORAL OR UNFINISHED DEGREE WORK:
(Check one)

_____ Postdoctoral Dates _____
(57-58)

_____ Unfinished doctoral Field _____
(59-62)

_____ Additional degree Institution _____

Name of additional degree _____
(56)

(see other side)

Professional registrations and licenses _____

HONORS:

<u>Award</u>	<u>Awarding Institution</u>	<u>Date</u>

Professional experience at other institutions: (71)

<u>Institution</u>	<u>City and State</u>	<u>Position or Rank</u>	<u>Dates</u>

Memberships in learned and professional societies:

NAME (Last, First, MI.)

5	6	26	27	28	29	30	31	32
Inst.	Rank	Adm	Res	Tech				Dept

Deg	Date	Field
-----	------	-------

Education: (A)	35	36	37	38	41
----------------	----	----	----	----	----

(C)	49	50	51	52	55
-----	----	----	----	----	----

Prof: Exp.	71	Prof ID + Comp	72	75	76	79	80
			Primary	Secondary			

6	9	10	13	14	17	21
Teach 1	Teach 2	Teach 3				

Additional Activities:	30	Geographic Areas:	31	32	33	34	35	36
------------------------	----	-------------------	----	----	----	----	----	----

Language Attainments:	37	38	39	40	41	42	43	44	45	46
-----------------------	----	----	----	----	----	----	----	----	----	----

Publications:	47	48	49	50	51	52	53	54	55	56
---------------	----	----	----	----	----	----	----	----	----	----

Research Projects:	57	58	59	60	61
--------------------	----	----	----	----	----

Consulting:	62	63	64	65	66	67
-------------	----	----	----	----	----	----

Public Service:	70	71	72	73	74	75
-----------------	----	----	----	----	----	----

Ref. Pages 21 and 33

Interests:	76	77	78	79	80
------------	----	----	----	----	----

FACULTY DATA BANK CODES

For all questions which require a yes or no answer, use one (1) to indicate yes and two (2) to indicate no.

Card Col.

Ques.

- | | | | |
|---|-------|--|---|
| 1 | 1-5 | <u>Sequential number.</u> Number subjects in order.
Start at 00001 and keep going. | |
| 1 | 6-25 | <u>Name.</u> Capital letters. Last name, space, first name, space, middle initial. Keep going until out of room and leave extra spaces blank. | 1 |
| 1 | 26,27 | <u>Institution</u>
AFIT 01
Antioch 02
Cedarville 03
Central State 04
Clark County 05
Sinclair 06
U. of Dayton 08
Wabash 07
Wilberforce 09
Wilmington 10
Wittenberg 11
Wright State 12 | 2 |
| 1 | 28 | <u>Rank or title</u>
Instructor 1
Assistant Professor 2
Associate " 3
" 4
Administrator 5 | 2 |
| 1 | 29-31 | <u>Administrator, Researcher, Teacher</u>
On the basis of title and department, check yes or no for each. | 2 |
| 1 | 32-34 | <u>Department</u>

<u>Miscellaneous</u>
Lecture 001
Research departments 002
Home Economics 003
Library Science 004
Physical Technology 005
Military Science 006
Research (Institutional or other) 007
Student Personnel 008
Other Admin. 009 | 3 |

<u>Engineering</u>	
Engineering (general)	100
Industrial and Technical Education, Technical Service Courses	105
Aeronautical Engineering	110
Chemical Eng.	120
Chemical Technology (Tech.)	125
Civil Engineering and Engineering Mechanics	130
Electrical Eng.	140
Electrical Tech.	145
Mechanical Eng.	150
Mechanical Tech.	155
Nuclear Reactor	160
Defense Weapons Mgt. Ctr.	170

<u>Humanities</u>	
Humanities (general)	200
<u>Language and Fine Arts</u>	
English, Language, and Fine Arts	201
Communications Arts	202
Speech and/or Drama	203
Language and Literature	204
English or Literature	205
Languages (Foreign or Modern)	206
Classics	207
Reading	208
Fine Arts	209
Art	210
Commercial Art	211
Music	212
<u>Philosophy, Religion, and History</u>	
Philosophy and Religion or Biblical Studies	213
Philosophy	214
Religion or Theological Studies	215
History	216

<u>Natural Sciences</u>	
Science and Math.	300
Biology	301
Chemistry	302
Geology	303
Math.	304
Physics	305

<u>Social and Behavioral Sciences</u>	
Social and Behavioral Sciences	400
Education and Psychology	410
Psychology	411
Education	412
Art Ed.	413

Card Col.

Ques.

Counselor Ed.	414
Elementary Ed.	415
Pupil Personnel	416
School Administration	417
Secondary Education	418
Social Studies or Sciences	420
Business or Administration	
(general)	421
Accounting	422
Data Processing or Computer	
Science	423
Finance	424
Insurance	425
Management (Systems Mgt.,	
(Systems and Logistics,	
Mgt. Studies, Maintenance Mgt., Material	
Mgt., Procurement &	
Production)	426
Marketing	427
Quantitative Studies (Logis-	
(tics Plans, Cost & Econ.	
Analysis, Systems Program	
Mgt.)	428
Secretarial	429
Government or Political	
Science	430
History and Govt.	431
Economics	432
" and Political	
Science	433
Economics and Business	434
Sociology & Anthropology &	
Social Work	435
Sociology & Anthhpology	436
Sociology	437
Social Work	438
Geography	439

Education

1	35, 42	<u>Degrees</u>		5
	49, 56	Bachelors	1	
		Masters	2	
		Doctorate	3	
		Professional (Law, M.D.,		
		Theology)	4	
		Post-doctoral work and non-		
		degree	5	
		Other	6	
1	36-37	<u>Date</u>		5
	43-44	Use last two numbers of date.		
	50-51			
	57-58			

Card Col.

Ques.

1 38-41
45-48
52-55
59-62

Field
Use HEBIS list.

1 63-72

Countries Visited

Put down the four visited for the longest period of time. Don't indicate any visited for less than 6 wks.

7

Africa

UAR	11
Northern -- Moslem countries	12
East Central -- Ethiopia, Nali, Mauritania, Somalia, Sudan, etc.	13
West Central -- Chad, Dahomey, Gambia, Ghana, Guinea, Liberia, Nigeria, Senegal etc.	14
Central -- Angola, Cameroun, Congo, etc.	15
East South Central -- Basutoland, Kenya, Malagasy (Madagascar), Rhodesia, Uganda	16
South	17

Asia

China including Taiwan	21
Southeast including Burma	22
Indian Subcontinent With Afghanistan and Ceylon	23
Japan & Okinawa	24
Korea	25
Formosa	26
Phillippines	27
Mongolia	28

Asia Minor

Arabian Peninsula	31
Iran	32
Iraq	33
Jordan, Lebanon, Syria	34
Israel	35
Turkey	36

Australia and East Indies

Australia	41
New Zealand	42
New Guinea and adjacent islands	43

Indonesia	44
Pacific Islands (other)	45

Western Europe

Scandinavian countries and Finland	51
Great Britain	52
Benelux	53
Germany	54
France	55
Austria & Switzerland	56
Iberian Peninsula	57
Greece and Yugoslavia	58
Italy	59

Eastern Europe

USSR (including Asian portion)	61
Poland	62
Czechoslovakia	63
Rumania	64
Bulgaria	65
Hungary	66
Albania	67

North America (except US)

Canada	71	Arctic	76
Central America	72		
Mexico	73		
West Indies	74		
Caribbean including Puerto Rico	75		

South America

Antarctica	81
Argentina, Paraguay, Uruguay	82
Brazil	83
Bolivia & Chile	84
Colombia	85
Ecuador & Peru	86
The Guianas and Surinam	87
Venezuela	88

United States

New England -- Conn., Maine, Mass., N.H., R.I., Vermont	91
Middle Atlantic -- Delaware, D.C., Maryland, N.J., N.Y., Penn.	92
South -- Ala., Fla., Ga., La., Miss., N.C., S.C.,	93
Border -- Ken., Tenn., Va., W. Va., Mo.	94
Middle West -- Ohio, Mich., Ill., Ind., Wis.	95
Northern Plains -- Iowa, Kansas, Minn., Neb., N.D., S.D.	96

South West -- Ariz., N.M., Tex., Okla.,
Ark. 97

Mountain -- Colo., Idaho,
Mont., Nev., Utah., Wyoming 98

Pacific -- Alaska, Calif.,
Hawaii, Ore., Wash. 99

1	71	<u>Professional Experience</u>	8
		None	0
		College teaching or research	1
		Other	2
1	72-79	<u>Professional Identification</u>	9a & b
		For both Primary and Secondary use HEGIS list.	
1	80	<u>Card number</u>	
		This should be 1.	
2	6-17	<u>Teaching competencies</u>	9c
		Code only three as well as possible.	
		Use HEGIS list.	
2	18-29	<u>Research competencies</u>	9d
		Use HEGIS list.	
2	30	<u>Additional Institutional Activities</u>	9e
		Administration	1
		Development (course, curri- culum, media, etc.)	2
		Institutional research	3
		Student Personnel	4
		Teaching	5
		Other	6
2	31-36	<u>Geographic areas</u>	9f
		Use list from "Countries Visited."	
2	37, 38	<u>Languages</u>	9g
	42, 43	<u>Name of language</u>	
	47, 48	<u>Romance and Germanic</u>	
	52, 53	French	01
	57, 58	Spanish	02
		Italian	03
		Portuguese	04
		Rumanian and other Romance	05
		German	06
		Scandinavian and Dutch	07
		Germanic, other	08

Ques.

Card Col.

		<u>Slavic</u>	
		Russian	11
		Polish	12
		Other	13
		<u>Indic, Iranian, Tamil & Telugu, Caucasian, & Ural-Altaic</u>	
		Hindi-Urdu	21
		Bengali	22
		Other	23
		<u>Afro-Asiatic</u>	
		Arabic	31
		Hebrew	32
		Kausa	33
		Semetic, Berber, Cushitic etc.	34
		<u>African</u>	
		Swahili	41
		Xhosa and Zulu	42
		Bantu, other	43
		Akan	44
		Ibo	45
		Yoruba	56
		Fula(ni)	47
		Other	48
		<u>East Asian</u>	
		Mandarin Chinese	61
		Chinese, other	62
		Japanese	63
		Other	64
		<u>Malayo-Polynesian, American Indian, Miscellaneous including pidgins</u>	71
2	39-41	<u>Competence</u>	
	44-46	"S" column for speaking.	
	49-51	"R" " " reading.	
	54-56	"W" " " writing.	
	59-61	1 = yes.	
		2 = no.	
2	62-67	<u>Publications</u>	12
		B = books (a)	
		A = articles (b)	1 = yes
		F = films etc.(d)	2 = no
		P = Drama etc.(e)	
		A = Art exhibits(f)	
		I = Inventions (g)	
2	68	<u>Research Projects</u>	13
		Yes or no.	
2	69	<u>Consulting</u>	14
		Yes or no	
2	70-75	<u>Public Service Activities</u>	15
		C = Consulting (a)	

Card Col.

Ques.

GC = Govt. Committees (b) Yes or no on each.
 CC = Community Committees (c)
 J = Editing journals (d)
 A = Accrediting procedures (e)
 O = Other (f)

2 76-79 Outside Interests 16
 On the basis of written response Yes or no on each.
 S = Speaking engagements
 C = Consulting
 CS = Community Service
 O = Other

NAME OF INSTITUTION

From HEGIS

PART D - BACHELOR'S, MASTER'S

IS PART D APPLICABLE TO YOUR INSTITUTION?
(If not applicable, proceed to Part C.)

YES

MAJOR FIELD OF STUDY

LINE NO.

EM O.

(1)

(2)

(3)

0000

AGRICULTURE

REPORT THE FOLLOWING AGRICULTURE-RELATED

Agricultural Chemistry (Report in Item 1721) Entomology (Report in Item 1733)
 Agricultural Economics (Report in Item 1731) Foods & Nutrition (Report in Item 1734)
 Agricultural Education (Report in Item 2319) Forestry (Report in Item 1735)
 Agricultural Engineering (Report in Item 2602) Genetics & Experimental Biology (Report in Item 1736)
 Botany (Report in Item 1707) Home Economics (Report in Item 1737)

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S

ITEM NO.

MAJOR FIELD OF STUDY

(1)

(2)

(3)

1700

BIOLOGICAL SCIENCES

REPORT THE FOLLOWING BIOLOGICAL SCIENCES

Animal Nutrition (Report in Item 1004)
 Clinical Dental Sciences (Report in Item 4446)
 Clinical Medical Sciences (Report in Item 4449)
 Clinical Veterinary Medical Sciences (Report in Item 4450)

Distinguish PREMEDICAL, PREDENTAL, and PREVETERINARY in general, includes curriculums in which the premedical or pre-dental typically includes curriculum oriented toward pre-further specialized study in such fields as MICROBIOLOGY. Items 1701 and 1704 is difficult to make, classify in the bi-
 NOTE: Students intending after graduation to enter school early enrolled in PREMEDICAL, PREDENTAL, or PREVETERINARY programs, in which case their degrees should be reported.

1701	PREMEDICAL, PREDENTAL, AND PREVETERINARY SCIENCES	
1704	BIOLOGY, GENERAL	
1707	BOTANY, GENERAL	
1710	ZOOLOGY, GENERAL	
1713	ANATOMY, HISTOLOGY	
1716	BACTERIOLOGY, VIROLOGY, MYCOLOGY, PARASITOLOGY, MICROBIOLOGY	
1721	BIOCHEMISTRY	
1724	BIOPHYSICS	
1727	CYTOLOGY	
1729	ECOLOGY	
1730	EMBRYOLOGY	
1733	ENTOMOLOGY	
1735	GENETICS (Including experimental plant and animal breeding)	
1738	MOLECULAR BIOLOGY	
1739	NUTRITION (Report Animal Nutrition in Item 1004)	
1739	OPTOMETRY (PREPROFESSIONAL BACHELOR'S DEGREE) (The usual professional degree in OPTOMETRY, awarded upon completion of a course qualifying the student to practice optometry, is to be reported in Part A.)	
1742	PATHOLOGY (Report Plant Pathology in Item 1731)	
1745	PHARMACOLOGY (Report Pharmacy in Item 4431)	
1749	PHYSIOLOGY (Report Plant Physiology in Item 1731)	

1001	AGRICULTURE, GENERAL (General Agriculture curriculum without major specialization)	1
1003	AGRICULTURE BUSINESS (if a separate curriculum)	2
1002	AGRONOMY, FIELD CROPS (Crop production, Tropical crop production)	3
1004	ANIMAL SCIENCE (Animal husbandry, Nutrition, Breeding, Industry, Livestock production, Wool production, Livestock sanitation)	4
1007	DAIRY SCIENCE (Dairy husbandry)	5
1013	FARM MANAGEMENT (Distinguish from AGRICULTURAL ECONOMICS, Item 1731)	6
1014	FISH, GAME, OR WILDLIFE MANAGEMENT	7
1016	FOOD SCIENCE (Food technology and processing, Dairy manufacturing and technology, Food industry)	8
1019	HORTICULTURE (Fruit and vegetable production)	9
1020	INTERNATIONAL AGRICULTURE (Foreign agriculture studies, if a separate curriculum)	10
1022	ORIENTAL HORTICULTURE (Floriculture, Nursery management, Landscape gardening and design, Park and turf management)	11
1025	POULTRY SCIENCE (Poultry husbandry and nutrition)	12
1028	SOIL SCIENCE (Soil management, Soil conservation)	13
1037	AGRICULTURE, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
1037		14
1037		15
1037		16
1037	AGRICULTURE, FIELD OF STUDY NOT IDENTIFIED (Use only when no indication as to specialization within Agriculture)	17
1040	ARCHITECTURE (Distinguish from ARCHITECTURAL ENGINEERING, Item 2604)	18
1050	CITY PLANNING	19

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S

EM D.	MAJOR FIELD OF STUDY	LINE NO.
	(1)	(2)
	BIOLOGICAL SCIENCES (Continued)	
151	PLANT PATHOLOGY	39
154	PLANT PHYSIOLOGY	40
157	BIOLOGICAL SCIENCES, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify) (DO NOT include degrees for work beyond M.D., D.D.S., or D.V.M. in clinical sciences such as CARDIOLOGY, OPHTHALMOLOGY, RADIOLOGY, ORTHODONTICS.) (See Items 1446-1452)	
757		41
757		42
757		43
757	BIOLOGICAL SCIENCES, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within the biological sciences)	44
757		
757	BUSINESS AND COMMERCE	

REPORT THE FOLLOWING BUSINESS AND COMMERCE

Business Education or Commercial Education (Report in Item 2202)
Economics (Report in Item 2212)

2001	BUSINESS AND COMMERCE, GENERAL (General curriculum in Business Administration or Business Management)	45
2002	ACCOUNTING	46
2003	FINANCE, BANKING	47
2004	HOTEL OR RESTAURANT ADMINISTRATION	48
2005	MARKETING	49
2006	REAL ESTATE, INSURANCE	50
2007	SECRETARIAL STUDIES	51
2016	TRANSPORTATION	52
2016	BUSINESS AND COMMERCE, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
2016	Mgt. & Admin.	53
2016		54
2016		55
2016	BUSINESS AND COMMERCE, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on specialization within Business and Commerce)	56
2100	COMPUTER SCIENCE AND SYSTEMS ANALYSIS (Report Proceeds Manual sent in Item 2100)	
		57

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S

ITEM NO.	MAJOR FIELD OF STUDY	LINE NO.
	(1)	(2)
	COMPUTER SCIENCE AND SYSTEMS ANALYSIS (Continued)	
2110	COMPUTER SCIENCE (Curriculum includes Logic, Theory, Mathematics, Engineering)	58
2120	SYSTEMS ANALYSIS (Curriculum includes Operations Analysis and applications of Computer Science.)	59
2150	COMPUTER SCIENCE AND SYSTEMS ANALYSIS, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
2153		60
2158		61
2158		62
2159	COMPUTER SCIENCE AND SYSTEMS ANALYSIS, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Computer Science and Systems Analysis)	63
2200	EDUCATION (If a student's major falls about equally within 2 fields classified in the more specialized or restricted of the 2 fields, list	

REPORT THE FOLLOWING EDUCATION-REL

Teaching of English as a Foreign Language (Report in Item 2210)
Religious Education (Report in Item 2401)

MAJORS FOR STUDENTS PREPARED TO TEACH: TN according to their major area of specialization. This may be an academic subject such as English, History, Mathematics, English (Item 2201), Biology (Item 1204), Mathematics (Item 2259), or Secondary Education (Item 2259).

SPECIALIZED

2301	PHYSICAL EDUCATION, SEPARATE CURRICULUM, OR COMBINED CURRICULUM WITH HEALTH EDUCATION OR RECREATION (Report non-teaching majors in Item 2373)	64
2304	HEALTH EDUCATION, SEPARATE CURRICULUM (Not part of Item 2301)	65
2305	Ed of Disadvantaged (Slum)	
2307	RECREATION, SEPARATE CURRICULUM	66
2308	EDUCATION OF THE MENTALLY RETARDED	67
2309	EDUCATION OF THE GIFTED	68
2310	EDUCATION OF THE DEAF	69
2311	SPEECH AND HEARING IMPAIRED (including speech correction)	70
2312	EDUCATION OF THE VISUALLY HANDICAPPED	71
2313	EDUCATION OF THE EMOTIONALLY DISTURBED	72
2314	SPECIAL LEARNING DISABILITY	73
2315	EDUCATION OF THE CRIPPLED	74
2315	EDUCATION OF THE MULTIPLE HANDICAPPED	75
2317	ADMINISTRATION OF SPECIAL EDUCATION	76

INSTITUTION	
PART B - BACHELOR'S, MASTER'S	
MAJOR FIELD OF STUDY	LINE NO.
(2)	(3)
EDUCATION (Continued)	
EDUCATION OF EXCEPTIONAL CHILDREN (All areas of specialization other than Items 2308-2317.)	77
AGRICULTURAL EDUCATION	78
ART EDUCATION	79
BUSINESS EDUCATION, COMMERCIAL EDUCATION	80
DISTRIBUTIVE EDUCATION, RETAIL SELLING	81
HOME ECONOMICS EDUCATION	82
INDUSTRIAL ARTS EDUCATION, NON-VOCATIONAL	83
MUSIC EDUCATION	84
TRADE OR INDUSTRIAL EDUCATION, VOCATIONAL (Report TRADE AND INDUSTRIAL TRAINING in Item 2022)	85
SPECIALIZED TEACHING FIELDS NOT LISTED ABOVE, SUCH AS ARTS AND CRAFTS EDUCATION, BUSINESS EDUCATION, SCIENCE EDUCATION, ETC. (Specify)	
	86
GENERAL TEACHING	
NURSERY, KINDERGARTEN EDUCATION	87
EARLY CHILDHOOD EDUCATION (Through primary grades)	88
ELEMENTARY EDUCATION	89
SECONDARY EDUCATION, INCLUDING JUNIOR HIGH SCHOOL (See paragraph 6(c) of "Instructions")	90
COMBINED ELEMENTARY AND SECONDARY EDUCATION (Prepares for both levels)	91
ADULT EDUCATION	92
GENERAL TEACHING FIELDS, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
	93
OTHER EDUC	
EDUCATION SPECIALIST (6-yr. degree)	94
EDUCATIONAL ADMINISTRATION, SUPERVISION, FINANCE	95
COUNSELING AND GUIDANCE (Subject in School of Education only)	96
REHABILITATION COUNSELOR TRAINING (See also Item 2105)	97
PHILOSOPHY, OR THEORY OF EDUCATION; EDUCATION	98

NAME OF INSTITUTION	
PART B - BACHELOR'S, MASTER'S	
ITEM NO.	MAJOR FIELD OF STUDY
(1)	(2)
	EDUCATION (Continued)
2373	CURRICULUM, INSTRUCTION
2375	EDUCATION, GENERAL (Without specific concentration) (Master's and Doctor's Degrees only, based on unspecialized work in Education, usually accompanied by some work in another field such as BIOLOGY, ENGLISH, HISTORY, etc. For inclusion in this item, the work in EDUCATION must predominate, i.e., comprise more than half the student's work for the degree.)
2377	EDUCATIONAL PSYCHOLOGY (If not classifiable in Item 7106)
2378	PHYSICAL EDUCATION - NONTEACHING
2379	Higher Ed.
2380	PRE-PROFESSIONAL BACHELOR'S DEGREE IN EDUCATION (DO NOT include here 4-year degrees in academic subjects.)
2382	OTHER NONTEACHING EDUCATION FIELDS NOT LISTED ABOVE (Specify)
2392	
2399	EDUCATION, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Education.)
2400	ENGINEERING
(In Columns 1 and 2, include both master's degrees and "other etc.") Please show the number of other postgraduate predictors	
2602	AEROSPACE, AERONAUTICAL, ASTRONAUTICAL ENGINEERING, AERONAUTICS, ASTRONAUTICS
2607	AGRICULTURAL ENGINEERING
2608	ARCHITECTURAL ENGINEERING
2610	BIOLOGICAL ENGINEERING
2612	CERAMIC ENGINEERING
2614	CHEMICAL ENGINEERING, PETROLEUM REFINING ENGINEERING
2621	CIVIL ENGINEERING, CONSTRUCTION ENGINEERING, TRANSPORTATION ENGINEERING (Report Sanitary Engineering in Item 2646)
2632	ELECTRICAL ENGINEERING, ELECTRONICS
2645	ENGINEERING SCIENCES, ENGINEERING MECHANICS, ENGINEERING PHYSICS, SCIENCE ENGINEERING
2646	ENVIRONMENTAL HEALTH ENGINEERING, SANITARY ENGINEERING
2647	GENERAL ENGINEERING, OTHER NONSPECIALIZED ENGINEERING CURRICULUMS
2649	GEOLOGICAL ENGINEERING, GEOPHYSICAL ENGINEERING, MINING GEOLOGY
2653	INDUSTRIAL AND MANAGEMENT ENGINEERING
2660	MECHANICAL ENGINEERING (Report Engineering in Item 2647)

INSTITUTION

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S	
MAJOR FIELD OF STUDY (2)	LINE NO. (3)
ENGINEERING (Continued)	
METALLURGICAL AND MATERIALS ENGINEERING, MATERIALS SCIENCE	120
MINING ENGINEERING, MINERAL ENGINEERING, MINING, MINERAL DRESSING (Report Mining Geology in Item 2649)	121
NAVAL ARCHITECTURE AND MARINE ENGINEERING	122
NUCLEAR ENGINEERING	123
PETROLEUM ENGINEERING (Report Petroleum Refining Engineering in Item 2614)	124
ENGINEERING, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
	125
ENGINEERING, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on specialization within Engineering)	126
ENGLISH AND JOURNALISM	
REPORT THE FOLLOWING ENGLISH AND JOURNALISM	
Linguistics (Report in Item 3501)	Speech
Speech Correction (Report in Item 2311)	Teach
ENGLISH, LITERATURE, CREATIVE WRITING, LANGUAGE ARTS, COMPARATIVE LITERATURE	127
JOURNALISM	128
FINE AND APPLIED ARTS	
REPORT THE FOLLOWING FINE AND APPLIED ARTS	
Art Education (Report in Item 2322)	
Speech Correction (Report in Item 2311)	
ART, GENERAL (Without specific major)	129
MUSIC, SACRED MUSIC (Distinguish from MUSIC EDUCATION, Item 2335)	130
SPEECH AND DRAMATIC ARTS (Exclude SPEECH CORRECTION, Item 2311)	131
FINE AND APPLIED ARTS, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Include Art History, Painting, Sculpture, Radio, TV, Interior Design, etc.) (Specify)	
	132
	133
	134
FINE AND APPLIED ARTS, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on specialization within Fine and Applied Arts)	135
FOLKLORE (Distinguish from Area Studies in which the emphasis is based on the study of a single area or region)	136

PART B - BACHELOR'S, MASTER'S	
ITEM NO. (1)	MAJOR FIELD OF STUDY (2)
3500	FOREIGN LANGUAGES AND LITERATURE
REPORT THE FOLLOWING FOREIGN LANGUAGES Area Studies and Regional Studies (Report in Item 2649) Teaching of English as a Foreign Language (Report in Item 2649)	
3501	LINGUISTICS (Include PHONETICS and SEMANTICS)
3511	LATIN, CLASSICAL GREEK
3513	MODERN LANGUAGES (Combination of three or more)
3520	FRENCH
3522	ITALIAN
3524	PORTUGUESE
3526	SPANISH
3543	PHILOLOGY AND LITERATURE OF ROMANCE LANGUAGES (Include only degrees based on broad study of the field. DO NOT include degrees based on study of a single language of the group. DO NOT include "double majors". See paragraph 8(d) of "Instructions".)
3546	GERMAN
3548	OTHER GERMANIC LANGUAGES (NORWEGIAN, SWEDISH, DANISH, ICELANDIC, DUTCH, AFRICAANS, SOUTH AFRICAN DUTCH, FLEMISH, etc.)
3549	PHILOLOGY AND LITERATURE OF GERMANIC LANGUAGES (Include only degrees based on broad study of the field. DO NOT include degrees based on study of a single language of the group. DO NOT include "double majors". See paragraph 8(d) of "Instructions".)
3560	ARABIC
3564	CHINESE
3568	HEBREW
3572	HINDI, URDU
3576	JAPANESE
3580	RUSSIAN
3585	OTHER SLAVIC LANGUAGES (P.S., BULGARIAN, SERBOCROATIAN, SLOVENIAN, BYELORUSSIAN, UKRAINIAN, CZECHOSLOVAK, POLISH)
3589	FOREIGN LANGUAGES AND LITERATURE, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)
3593	
3599	

PART B - BACHELOR'S, MASTER'S,

PART B - BACHELOR'S, MAS

MAJOR FIELD OF STUDY	LINE NO.
(2)	(3)
FOREIGN LANGUAGES AND LITERATURE (Continued)	
FOREIGN LANGUAGES AND LITERATURE, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify) (Continued)	
	157
FOREIGN LANGUAGES AND LITERATURE, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Foreign Languages and Literature)	158
FORESTRY (Silviculture, Forest Management, Wood Utilization)	159
GEOGRAPHY	160
HEALTH PROFESSIONS	

REPORT THE FOLLOWING HEALTH PROFESSION-

6-or-more-year First-Professional Degrees (Report in Part A)
 Biological Sciences, such as Anatomy, Histology, Bacteriology,
 Pathology, and Physiology (Report in Items 1701-1757)
 Medical Record Science, Medical Record Librarianship (Report
 in Item 7300)
 Nursing Education (Training of Teachers of Nursing),
 School Nurse (Report in Item 2342)

CHIROPODY OR PODIATRY (Report First-Professional degrees in Part A)	161
DENTAL HYGIENE (Include only degrees based on 4 or more years of college work. Include Certificates or Diplomas only if based on at least 4 years of work.)	162
HOSPITAL ADMINISTRATION (Include in Columns 7 and 8 all master's degrees even if the master's is a first-professional degree.)	163
MEDICAL TECHNOLOGY (Include only degrees based on 4 or more years of college work. Include Certificates or Diplomas only if based on at least 4 years of work.)	164
NURSING, PUBLIC HEALTH NURSING (Include only degrees based on 4 or more years of college work. Include Certificates or Diplomas only if based on at least 4 years of work.)	165
OCCUPATIONAL THERAPY (Include only degrees based on 4 or more years of college work. Include Certificates or Diplomas only if based on at least 4 years of work.)	166
OPTOMETRY (Report preprofessional bachelor's degrees in Item 1739, and first-professional degrees in Part A.)	167
OSTEOPATHY (Report first-professional degrees in Part A.)	168
PHARMACY	169
PHYSICAL THERAPY, PHYSIOTHERAPY (Include only degrees based on 4 or more years of college work. Include Certificates or Diplomas only if based on at least 4 years of work.)	170
PUBLIC HEALTH	171
RADIOLOGIC TECHNOLOGY (Mainly X-Ray technic) (Include only degrees based on 4 or more years of college work. Include Certificates or Diplomas only if based on 4 years of work.)	172
CLINICAL DENTAL SCIENCES (Include degrees beyond B.S. or D.M.D. for work in such clinical sciences as ORTHODONTICS, PEDODONTICS, PERIODON-	173

MAJOR FIELD OF STUDY	ITEM NO.
(2)	(1)
HEALTH PROFESSIONS (Continued)	
CLINICAL MEDICAL SCIENCES (Include degrees beyond M.D. for work in such clinical sciences as CARDIOLOGY, OPHTHALMOLOGY, RADIOLOGY, NEUROLOGY, SURGERY, etc.)	4449
CLINICAL VETERINARY MEDICAL SCIENCES	4452
HEALTH PROFESSIONS, OTHER FIELDS OF STUDY NOT LISTED ABOVE (DO NOT include the M.D., D.D.S., O.D., which are first-professional degrees. Report Medical Record Science and Medical Record Librarianship in Item 7300.)	4455
	4455
	4455
	4455
HEALTH PROFESSIONS, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Health Professions.)	4439
HOME ECONOMICS	4700

REPORT THE FOLLOWING HOME ECONO-

Food Technology (Report in Item 1016)
 Home Economics Education (Report in Item 2331)

HOME ECONOMICS, GENERAL	4701
CHILD DEVELOPMENT, FAMILY RELATIONS	4704
CLOTHING, TEXTILES	4707
FOODS AND NUTRITION	4710
INSTITUTION MANAGEMENT, INSTITUTION ADMINISTRATION	4713
HOME ECONOMICS, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Include specialized fields such as Family Economics and Management, Home Furnishings, Housing and Equipment, etc.) (Specify)	4719
	4719
	4719
	4719
HOME ECONOMICS, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Home Economics.)	4729
LAW (Report in Columns 5 and 6 undergraduate majors specifically designated "Prelaw". For other students planning to enter law school, report undergraduate major in appropriate field. Report first-professional degrees in Part A.)	5000
LIBRARY SCIENCE (Include degrees awarded for completion of a general library curriculum, or of a specialized curriculum in public library service, school library service, college librarianship, etc.)	5300
MEDICAL RECORD SCIENCE AND MEDICAL RECORD LIBRARIANSHIP (Report in Item 7300)	

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S

ITEM NO.	MAJOR FIELD OF STUDY	LINE NO.
(1)	(2)	(3)
5600	MATHEMATICAL SCIENCES (Report Computer Sciences and Systems Analysis in Item 2100)	
5601	MATHEMATICS	191
5607	STATISTICS	192
5900	MILITARY SCIENCE	
5910	MERCHANT MARINE (Deck Officer only)	193
5920	MILITARY, NAVAL, OR AIR FORCE SCIENCE	194
6500	PHILOSOPHY	
6501	PHILOSOPHY (Except for Item 6504 below)	195
6504	SCHOLASTIC PHILOSOPHY (Include degrees with concentration in SCHOLASTIC PHILOSOPHY, which in combination with other LIBERAL ARTS SUBJECTS, INCLUDING LATIN, fulfill the "PRETHEOLOGY" requirement in Catholic Seminaries.)	196
6000	PHYSICAL SCIENCES	

REPORT THE FOLLOWING PHYSICAL SCIENCE-RE

Biophysics (Report in Item 1724)

Chemical Engineering (R

Biochemistry (Report in Item 1721)

Metallurgical Engineering

6801	PHYSICAL SCIENCES, GENERAL (Without specific major). OBSERVE THE DISTINCTION BETWEEN PHYSICAL AND NATURAL SCIENCES (Items 6501 & 8104); THE LATTER INCLUDES BIOLOGICAL SCIENCES AS WELL AS PHYSICAL	197
6804	ASTRONOMY	198
6807	CHEMISTRY (Report PHARMACEUTICAL CHEMISTRY in Item 6315)	199
6810	METALLURGY	200
6813	METEOROLOGY	201
6815	PHARMACEUTICAL CHEMISTRY	202
6816	PHYSICS	203

EARTH

6818	EARTH SCIENCES, GENERAL	204
6819	GEOLOGY	205
6822	GEOPHYSICS (Include SEISMOLOGY)	206
6825	OCEANOGRAPHY	207

OE FORM 2300-2.1, 3/63

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S

ITEM NO.	MAJOR FIELD OF STUDY	LINE NO.
(1)	(2)	(3)
	PHYSICAL SCIENCES (Continued)	

EARTH SCIENCE

6828	EARTH SCIENCES, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
6828		208
6828		209
6820		210
6831	PHYSICAL SCIENCES, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
6831		211
6831		212
6830	PHYSICAL SCIENCES, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Physical Sciences)	213
7100	PSYCHOLOGY	
7101	GENERAL PSYCHOLOGY	214
7102	CLINICAL PSYCHOLOGY	215
7103	COUNSELING AND GUIDANCE (Psychology majors only. See Item 2371)	216
7104	SOCIAL PSYCHOLOGY	217
7105	REHABILITATION COUNSELOR TRAINING (If not classifiable in Item 2373)	218
7106	EDUCATIONAL PSYCHOLOGY (See also Item 2377)	219
7110	PSYCHOLOGY, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
7110		220
7110		221
7150	PSYCHOLOGY, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Psychology.)	222
7350	RECORDS MANAGEMENT (Include Medical Record Science and Medical Record Librarianship)	223
7400	RELIGION	

REPORT THE FOLLOWING RELIGION-RE

First Professional degrees requiring 6 years or more (Report in

PRETHEOLOGY DEGREES SHOULD BE CLASSIFIED ACCORDING TO

Arts, General Program (Report in Item 8301)

English (Report in Item 2901)

History (Report in Item 2716)

Philosophy (Report in Item 2716)

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S,

ITEM NO.	MAJOR FIELD OF STUDY	LINE NO.
(1)	(2)	(3)
	RELIGION (Continued)	
7401	RELIGIOUS EDUCATION, BIBLE (Include degrees such as BACHELOR OF RELIGIOUS EDUCATION (B.R.E.), B.A. in BIBLICAL EDUCATION, MASTER OF RELIGIOUS EDUCATION (M.R.E.), etc.) THE CURRICULUM FOR SUCH DEGREES GENERALLY INCLUDES SOME BASIC LIBERAL ARTS SUBJECTS, INTENSIVE STUDY OF THE BIBLE, AND/OR PREPARATION FOR SERVICE IN SUCH FIELDS AS RELIGIOUS SOCIAL WORK, LEADERSHIP IN BIBLICAL EDUCATION, MISSION WORK, ETC. (Distinguish from professional ministerial degrees in THEOLOGY, Part A.)	224
7407	THEOLOGY (Report B.D., or shallar first-professional degrees requiring at least 6 years in Part A.)	225
7410	RELIGION, LIBERAL ARTS CURRICULUM, NONSECTARIAN (Include degrees based on a major comprising such courses as COMPARATIVE RELIGION, HISTORY OF RELIGION, PHILOSOPHY OF RELIGION, PSYCHOLOGY OF RELIGIONS, RELIGION AND THE STATE, etc.)	226
7413	RELIGION, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
7413		227
7413		228
7413		229
7499	RELIGION, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Religion)	230
7700	SOCIAL SCIENCES	

REPORT THE FOLLOWING SOCIAL SCIENCE-REL

Folklore (Report in Item 3300)

Geography (Report in Item 4100)

BASIC SOCIAL SCIENCES

7701	SOCIAL SCIENCES, GENERAL (Without specific major)	231
7704	AMERICAN STUDIES, AMERICAN CIVILIZATION, AMERICAN CULTURE (Similar to AREA STUDIES, Item 7710, but with focus on the United States. DO NOT confuse with AMERICAN HISTORY which should be reported as HISTORY, Item 7716.)	232
7707	ANTHROPOLOGY	233
7710	AREA STUDIES, REGIONAL STUDIES (An organized curriculum bearing particularly on a foreign country or region. The curriculum may include basic courses in the languages and literature of the country or region, as well as courses on GEOGRAPHIC CHARACTERISTICS, SYSTEM OF GOVERNMENT, HISTORICAL DEVELOPMENT, INTERNATIONAL RELATIONS, ECONOMIC ASPECTS, THE EDUCATIONAL PROGRAM, RELIGIOUS BELIEFS, MORALS, etc.) (Report Folklore in Item 3300.)	234
7713	ECONOMICS (Report AGRICULTURAL ECONOMICS in Item 7731)	235
7716	FOLKLORE (Report in Item 3300) GEOGRAPHY (Report in Item 4100)	
7716	HISTORY	236
	INTERNATIONAL RELATIONS	237

NAME OF INSTITUTION

PART B - BACHELOR'S, MASTER'S,

ITEM NO.	MAJOR FIELD OF STUDY	LINE NO.
(1)	(2)	(3)
	SOCIAL SCIENCES (Continued)	
	BASIC SOCIAL SCIENCES	
	SOCIAL PSYCHOLOGY (Report in Item 7104)	
7725	SOCIOLOGY	239
7728	BASIC SOCIAL SCIENCES, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
7728		240
7728		241
	APPLIED SOCIAL SCIENCES	
7731	AGRICULTURAL ECONOMICS	242
7734	FOREIGN SERVICE PROGRAMS (Consular and diplomatic service) (Leading to qualification for appointment as foreign service officer of U.S. Department of State)	243
	HOSPITAL ADMINISTRATION (Report in Item 4110)	
7737	INDUSTRIAL RELATIONS	244
7740	PUBLIC ADMINISTRATION (Report City Planning in Item 1500)	245
7743	SOCIAL WORK, SOCIAL ADMINISTRATION, SOCIAL WELFARE	246
7746	APPLIED SOCIAL SCIENCES, OTHER FIELDS OF STUDY NOT LISTED ABOVE (Specify)	
7746		247
7746		248
7799	SOCIAL SCIENCES, FIELD OF STUDY NOT IDENTIFIED (Use only when no information on the specialization within Social Sciences)	249
8000	TRADE OR INDUSTRIAL TRAINING (Distinguish from Trade and Industrial Education, Item 2339, which is designed for the training of teachers. Include degrees based on at least 4 years of college work in such fields as Light Building Construction, Heating and Ventilating, Airplane Mechanics, Automotive Maintenance, Printing, Tanning, Technology below the level of Engineering, Industrial Supervision, etc.)	250
8300	BROAD GENERAL CURRICULUMS AND MISCELLANEOUS FIELDS	
8301	LIBERAL ARTS, GENERAL PROGRAM (Without major field. Include degrees based on a variety of courses drawn mainly from the fields of LITERATURE, FOREIGN LANGUAGES, SOCIAL SCIENCES, PHILOSOPHY, PSYCHOLOGY, FINE ARTS, etc.)	251
8304	SCIENCE, GENERAL PROGRAM (Without major field. Include degrees based on a variety of courses drawn mainly from the fields of PHYSICAL AND BIOLOGICAL SCIENCES AND MATHEMATICS)	252
8307	ARTS AND SCIENCES, GENERAL PROGRAM (Include degrees based on a broad variety of courses drawn mainly from the fields of the HUMANITIES, SCIENCE, AND SOCIAL SCIENCES)	253
8310	TEACHING OF ENGLISH AS A FOREIGN LANGUAGE (Include degrees which prepare teachers of English as a foreign language. DO NOT include degrees in English for other purposes.)	254

CONSORTIUM PERSONNEL ASSISTING IN THE DEVELOPMENT OF DR. APT'S PROPOSAL,
THE RETRAINING OF TEACHERS AND ADMINISTRATORS

1. Committees of Consortium members and representatives of the community have concentrated on specific aspects of the pilot proposal.

a. A Consortium Committee formed to identify and assess priority needs has reached its final stage of operation and is submitting a statement to be included in the pilot proposal. The following persons are involved in this task:

Dr. Harold Silverman, Associate Professor, Wright State University
Dr. Violet Jackson, Central State University
Mr. John Hamilton, Special Assistant, Academic Vice President, Antioch College
Mr. Louis King, Associate Professor, Antioch College
Mr. Don Richards, Assistant Dean, Wright State University
Mr. Francis D. Silvermail, Wittenberg University
Dr. Madeline Apt, Assistant Professor, Wright State University

b. A Committee designed to identify specific objectives of the pilot project is continuing its work on this portion of the proposal. The following persons are involved in this task:

Dr. Harold Silverman, Associate Professor, Wright State University
Dr. Violet Jackson, Central State University
Mr. Don Richards, Assistant Dean, Wright State University
Mrs. Ermin Frey, Wilberforce University
Dr. Madeline Apt, Assistant Professor, Wright State University
Mr. Arthur Thomas, Director, Dayton Model Cities Education Program
Mr. John Hamilton, Special Assistant, Academic Vice President, Antioch College

c. Additional Committees which have been organized and are functioning are those concerned with assembling and concentrating resources of Consortium member institutions; independent evaluation of project; consultative assistance; dissemination of results; eligibility and selection of participants; work experiences; project staffing; budget; and selection of key personnel.

The following persons have been involved in these tasks:

Mr. John Hamilton, Special Assistant, Academic Vice President, Antioch College
Dr. Robert Tripp, Antioch College
Mr. Louis King, Antioch College
Dr. Graydon W. Yapple, Vice President, Wilmington College
Dr. Merlin Ager, Division of Education and Psychology, Cedarville College
Dr. John M. Stanfield, Division of Education-Psychology, Urbana College
Dr. C. C. Bussey, Provost, Sinclair Community College
Mrs. Ermin Frey, Education Department, Wilberforce University
Dr. Violet Jackson, Central State University
Dr. John O'Donnell, Educational Administration, University of Dayton
Mr. Francis D. Silvermail, Wittenberg University
Dr. Erno J. Dahl, Dean, Wittenberg University
Dr. Charles J. Armstrong, President, Dayton-Miami Valley Consortium
Mr. Arthur Thomas, Director, Dayton Model Cities Education Program
Mr. Zeller Henry, Chamber of Commerce, Dayton
Dr. Harold Silverman, Associate Professor, Wright State University
Dean Norwood Marquis, Division of Education, Wright State University
President Brane Golding, Wright State University
Dr. Roger Iddings, Director, Undergraduate Studies, Wright State University
Mrs. Bea Chait, Director, Laboratory Experiences, Wright State University
Dr. Madeline H. Apt, Assistant Professor, Wright State University.

Ref. Page 24

MANPOWER PROPOSAL

(DMVC Representatives)

John Hamilton, Coordinator, Government Support Programs,
Antioch College

Dr. Harold Silverman, Assistant Dean, Wright State University
Graduate School

Dr. Eugene Runyon, Chairman, Department of Psychology,
Central State University

Dr. James Buckenmeyer, Assistant Professor of Business Manage-
ment, University of Dayton

Howard Neal, Clark County Technical Institute, Department of
Industrial Education

Lt. Col. Frank A. Stickney, Department of Systems, Air Force
Institute of Technology

Dr. Reed Smith, Professor of Political Science, Wright
State University

Dr. Madeline Apt, Assistant Professor of Education, Wright
State University and University of Dayton

Dr. Clyde Schrickel, Associate Professor of Management,
Wright State University

Mr. James Perry, Urbana College

Dr. Martin Giesbrecht, Chairman, Business Administration,
Wilmington College

Richard Liming, Assistant Professor of Economics,
Wittenberg University

Perry Hall, Director of Rehabilitation Training Project,
Wright State University

Dr. Cleveland McDonald, Chairman of Social Sciences,
Cedarville College

Professor Ned Sifferlin, Business Technology, Sinclair
Community College

Dr. Lois Sparks, Assistant Professor of Sociology,
Wilberforce University

Ref. Page 27

DAYTON-MIAMI VALLEY CONSORTIUM

EDUCATIONAL RESOURCE CENTER - 608 Oak Street, Dayton, Ohio

New School of Social Research - catalogues and course offerings
Tutoring Manual - NSA
Community Action Curriculum Project - NSA
A Training Plan for Campus-Community Organizing - NSA
Independent Learning-Accion Network by Lynn Shapiro
Basic Exploration, First Proposal - Antioch College
Proposal for General Education at Antioch College
Education and Community by Fred Newman
Committee Report for Study of Educations and Society by R. Baker
Notes on Group Dynamics
Notes on Psychology of Learning
Critical Education
Under-graduate Curriculum Trends by Paul Dressel
The Importance of Teaching by C. Rothwell
Antioch College - Proposed syllabus for student initiated course (form)
The Program of General Education
Interdisciplinary major, description and procedure
Petition for a general education degree (form)
Proposed plan for degree (form)
Notes of the Union for Research and Experimentation in Higher Education
Degrading Education by Klawitter
Antioch College Reports - Experiment in Independent Study
Using groups in Independent Study
Videotape and the Academicians
Effecting Change in the College Student,
Who Teaches What?
Individualized General Education by Watson
Reading list for Black Studies
Catalogue of the experimental college - University of Dayton
Quality and Conscience in the Educational Supermarket by Jerome
Faculty Roles and Affiliations - Antioch College
Chaminade High School - Learning and the Individual
People for the People - Oakland University
Inter-collegiate Press Bulletin - 1967-8-9-70
Extradepartmental Academic Activity - proposal and procedure (U.D.)
Some Ideas on Education Reform in Engineering (U.D.) by Fitz
Universities on Collision Course by D. Riesman
Center for Curriculum Design - Kendall College
The Catholics and their Colleges by Jencks and Reisman
Student Document on Reform of the Educational System at the
University of Dayton by Orth
General College Program at University of Minnesota
Ideas on Reform by Orth
General Program of Liberal Studies - Notre Dame
Magaziner Report - Brown University
Segregation and Abuse of Due Process on the American Campus
Personal Introduction to the Facilitator by Werdell
Training in Non-group
How Wealth Puts Knowledge in Its Pocket
Blacks and Whites on Campus - Antioch Notes
Planning and Effecting Needed Changes in Individual Schools by Glines
Action Now - St. Norberts College

EDUCATIONAL RESOURCE CENTER (con.)

Center for Participant Education

Eduthink

On Learning and Social Change by Rossman

Revolt of the Diminished Man by MacLeish

CPE-Journal of Educational Criticism

Walden U by Hogkinson

SimSoc manual

Space for Something Else: Bensalem

Student Participation in Campus Governance

Needed Changes for Further Improvement of Secondary Education

Free Universities and Colleges

Educational Policy Research Center at Syracuse: Problems and Prospects

Basic, Long-term Trend in Education by Marien

Innovate (U.D.) - two editions

Course Withdrawal Procedure of Various Colleges

Prescott College Catalogue

Winston-Salem Learning-Service Project

Innovation, Renovation and Tinkering

University Without Walls Proposal

Teacher Education - Center for Research on Learning and Teaching

Hiram College Program - New Curriculum

Freshman Colloquia - course offerings and
syllabus

The Twentieth Century and Its Roots

Freshman Institute - evaluation

Course Projection and Staffing Needs

Evaluations of Curriculum

Search for Alternate Models in Education by Riesman

Prolegomenon to Development of a History Curriculum by McGill

Reform of General Education on the Social Sciences by Winthrop

Departmental Review and Self-study by Dressel

Resources on Education: Books and Publications

Students Without Teachers by Taylor

World as Teacher by Taylor

Academic Revolution by Jencks and Reisman

Education and Ecstasy by Leonard

Compulsory Mis-education by Goodman

Black Studies in the University

Reforming General Education by Bell

Change Magazine

Chronicle of Higher Education

Intercollegiate Press Bulletin

Report of an Evaluation of an Experimental College Level Course
by CONRAD, Inc.

Minorities in the Curriculum

St. John's College Catalogue

Student-Centered Teaching

Antioch College - files on campus governance

Revolution in Education - University of Massachusetts

Selected Bibliography

Center for Study of Education Innovation - University of Massachusetts

EDUCATIONAL RESOURCE CENTER (con.)

Youth Opportunity Programs - University of Chicago

Washington Area Free University catalogue

High House

Independent Study bibliography

Generation in Search of a Future

files on (1) grading systems

(2) co-ed dormitories

(3) American Studies

Racial Isolation in Public Schools

General Federal Support for Higher Education

Course and Teacher Evaluation by Werdell

Three Programs in General Education by Chapman

Inter-Session Program 4 - 1 - 4: Freshman Special Studies Course Roster

Definition of Program

Pending Calendar and Curricular Proposals

Student Proposal for Intersession program (form)

Course Roster

Interim Report

Student Intersession Questionnaire (form)

Brown University - Interim Report and Final Report

More than one: (copies obtained at request)

Faculty Roles and Affiliations (one page)

On Learning and Social Change, three parts

Chaminade High School (one page)

Ideas on Reform (one page)

St. Norberts College Address (four pages)

What is the University (one page)

U. D. Reform Document (28 pages)

Student in Higher Education

New Developments in Higher Education by Baskins (11 pages)

Intentional Community Handbook by Community Service, Inc.

Individualized General Education by Watson (27 pages)

University Without Walls (36 pages)

Student Participation in Campus Governance by NSA (4 pages)

Antioch College Reports

DMVC

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Ref. Page 65

JOURNAL HERALD

Glenn Thompson, Editor

Charles T. Alexander
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Theodore Bingham
Editor, Editorial Page

Page 4

Friday Morning, November 21, 1967

The Tough Question

Supporters of a proposed international trade center west of the Dayton airport were asked a tough question Tuesday during their presentation in Columbus.

A member of the governor's committee selected to recommend a site for such a center in Ohio asked whether Dayton-area colleges and universities offer strong programs in foreign languages and international trade.

Our fellows had to admit that they didn't know.

What this suggests to us is a real need for gathering—and analyzing—all kinds of data about the educational facilities hereabouts.

What it suggests is that efforts should be started now to apply the newest of systems approaches in finding out what exactly we have on hand in the way of

schooling, what precisely we should have and what can be done to fill the gaps. Obviously, as underlined in Columbus on Tuesday, such information can have immediate and practical use in this area as it emerges as a complex and powerful urban center.

So far we've gone about such things piecemeal, with the one major exception being the creation of a consortium involving local colleges and universities. But the work of compiling, analyzing and applying available educational resources ought to encompass our total educational system—primary schools on up—so as to prepare it and our young people for today's exceptional demands. Right now, the very practical question put in Columbus is only one of thousands which might be asked and, by necessity, left unanswered.